# The Obstetric Gazette.

Vol. VI. — FEBRUARY, 1883. — No. 2.

## Original Articles.

### AN OPERATION FOR CLOSING DOUGLAS' CUL-DE-SAC.

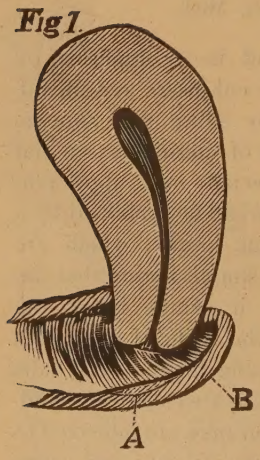
By O. E. Herrick, M.D., Grand Rapids, Mich.

This operation is just what its name implies, and is accomplished by denudation of the whole or part as required of the cul-de-sac and the adjacent uterine neck, after which they are united by silver wire sutures. The conditions calling for this operation are cases of uterine flexion and version accompanied with voluminous vagina, especially in its upper portion and while most cases of either flexion or version can be remedied by a proper fitting pessary, there are cases as every one knows, which are only benefitted while the support is worn; for the simple reason that the vaginal canal is so large and its walls so weak that it cannot afford the support nature intended it should, and as soon as the artificial support is removed the uterus like a house with its underpining taken away, falls over one way or the other. I apprehend that most cases are caused by childbirth, the muscular fibres being broken by the tension they are subjected to while the childs head is passing, and consequently the *columns* and *rugae* never again contract after the dilatation of parturition while this is often the case, there are others though of less frequent occurrence some vaginæ are naturally larger than others, and out of all proportion to the uterus, and other organs of generation, these seem to have been made with the sole purpose of causing their owners trouble; like all other natural deformities: another cause of dilated and weak vaginal walls is undoubtedly attributable to inordinate sexual congress, as it is frequently seen in old women of the town who have long pursued their degrading avocations; so common is it with such females that many of them use daily injections of alum and other astringents for the purposes of contracting the canal, thus leading their patrons to think them young in the business: (there are said to be tricks in all trades, and this is one of theirs.) The opera-

tions heretofore made to remedy this condition have consisted of removing strips of mucous membrane from the walls, and then bringing the edges together, this plan does quite well for a time, but the membrane seems to stretch, and in a year or two the vagina is as large as ever, besides it has little effect on the flexed uterus as the leverage of the vagina remains nearly unchanged.

The vagina in structure is composed of a muscular coat, a layer of erectile tissue, and an internal mucous lining, besides these there is a cushion of fat and areolar tissue which the posterior vaginal wall rests upon for two-thirds its length thus adding to its thickness and strength. Above that point or at the cul-de-sac, the walls of the vagina are unsupported, except by the recto-uterine fold of the peritoneum, which does not add to its strength, with this portion then of the vagina denuded and attached to

FIG. 1.—Shows Anteverted Uterus, with dotted lines. (a) Shows portion of the vagina to be denuded. (b) The portion of uterine neck to be denuded.



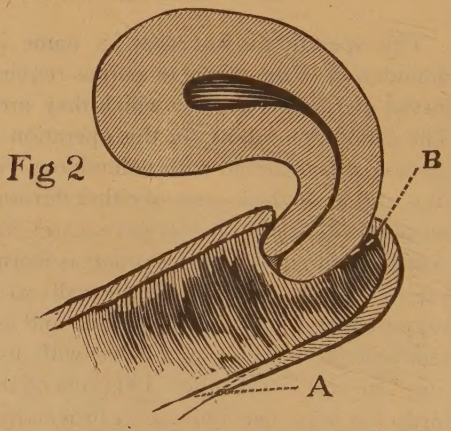




FIG. 2.—Shows Anteflexed Uterus with dotted lines at (a). (b) Showing points to be denuded. (a) The portion of vagina, which includes nearly the whole cul-de-sac. (b) Whole of uterine neck.

the uterus at the extreme end the *weak place in the vagina is obliterted*, and the uterine neck made just that much thicker and stronger for the cul-de-sac portion of the vagina is attached to it, and becomes a part of it; besides the slack (if I may use a homely phrase) of the vagina is taken up and thus shortens its leverage upon the uterus preventing it from tilting forward as in ante version, and what is more important flexion is prevented forward for the same reason, and the additional one that the uterine neck is thickened and strengthened. It will be noticed that the vagina is attached to the end of the uterus in this operation, just at the point

where it is only supported by a fold of peritoneum instead of the rectum and cushion of fat areolar tissue, etc., as it is for the lower three-fourths, thus adding another element of strength to it. In almost all cases of flexion there is a slender and flabby neck, hence, the addition of the vaginal wall to it makes it much thicker, and as a matter of course stronger, and prevents displacement in any direction, for the reason that the uterus is anchored to a fixed point in the vagina, thus preventing it from swaying around in the pelvic cavity, as does the normal uterus, and it is only when the attachments allow unusual motion that the organ becomes displaced; and a volumnious vagina is one of the causes of this unusual motion, con-

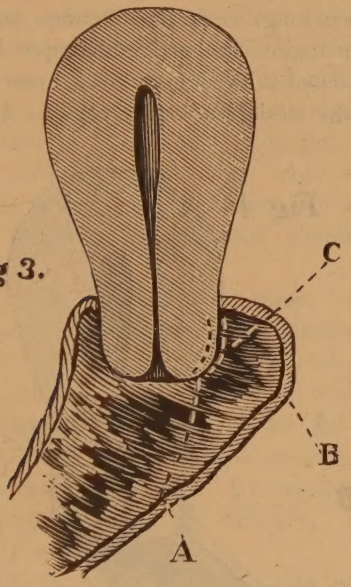



FIG. 3.—Uterus and Voluminous Vagina. (a) Shows axis of vagina after operation. (b) Faulty direction and size of vagina before operation. (c) Portion of uterine neck to be denuded, and point of new attachment of vagina.

sequently, when the vagina is narrowed, and the uterine neck made fast to a fixed portion of it as in this operation, movement of the uterus is necessarily limited sufficiently to prevent displacement in any direction. The first question asked will be, does not this operation prevent dilation of the uterus and vagina during pregnancy and parturition? and I can only say that I know of only one case of pregnancy following this operation, and in that one there was no trouble nor any laceration of structures; neither can I see why there should be, for the uterus and vagina dilates gradually and at the same time. I have only made this operation four times, but complete union took place, and the desired results were obtained in each case. I know very well that four cases does not prove the efficacy

of an operation for all such conditions, but it proves its efficacy in these *four cases* and personally I believe in its feasibility in all cases of a like nature. It is unnecessary in all cases to denude this whole posterior cul-de-sac, as the object is only to shorten the posterior vaginal wall and give the uterus a steady point of support: in some cases then, it is only necessary to denude the vaginal wall opposite where it is supported by the rectum and areolar tissue, then the uterine neck is denuded and the uterus drawn down and fastened at that point, which will of course leave a portion of the cul-de-sac still unattached to the uterine neck, it is only necessary to denude the whole cul-de-sac when the uterine neck is very slender and flabby. [See cut.] When the vagina is unusually voluminous and the uterine neck, very long, weak, and slender, and as liable to flex one way as the other, the vagina can be denuded upon both anterior and posterior walls, and attached to the uterine neck upon both sides, thus fixing the uterus firmly in the mesial line of the vagina. By studying the accom-

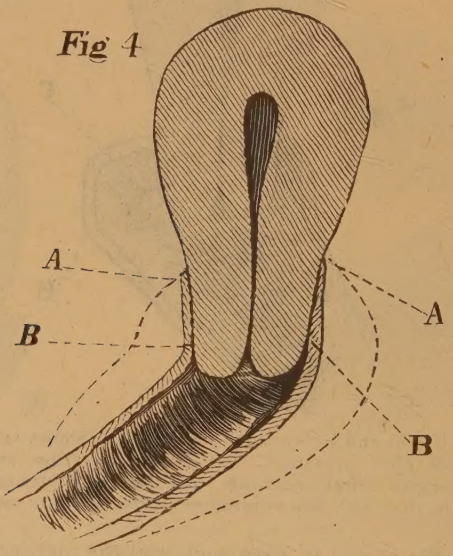



FIG. 4.—Uterus and Vagina after operation upon both anterior and posterior neck. (a. a) Dotted lines showing points of attachment and size of vagina before operation. (b.b.) Shows points of attachment and vagina after operation.

panying cuts, the reader will readily catch the plan of this operation. While I do not believe that any considerable number of cases of uterine displacements require this operation, I feel assured that there are a few such as I have mentioned which will be benefitted by it, and these are cases that can not be permanently remedied by any pessary or uterine supporter on account of their anatomical structure, I suppose, like all

other gynecological operations, this new one should be dubbed with a Latin or Greek, or a mixture-of-both name, not less than *four inches in length;* but I must confess that I feel unequal to the occasion, and so request that some of my professional friends who are well up in gynecological nomenclature furnish the youngster with a handle of the most approved modern length.

## LABOR DELAYED BY A SHORTENED CORD.

By William Beebe, M.D., Barlow, Ohio.

I had an experience, quite lately, very like that of the gentleman of Hooper, Neb., noted in the "Abstracts and Selections" of the December number of the Obstetric Gazette. The "delay," however, in my case, was not due to a "retained placenta"—certainly not.

A multipara was taken in labor about midnight, the pains continued with varied intensity until two o'clock p.m., when they ceased entirely. As the lady's habit was to have rapid deliveries, her friends were surprised and alarmed, and urged the professional attendant to send for a consultant.

On my arrival, at 5 p.m., I found a capacious vagina filled with the "sack of waters," which I ruptured and immediately the head was expelled. During the interval I found several coils of cord around the neck which I was unable to remove. A second contraction followed, but no advance. By a hurried examination I felt the placenta and ascertained that the length of cord, from point of insertion into the placenta to child's neck, was less than four inches. I severed the cord, the placenta receded and the next pain finished the delivery. The cord proved to have been *four* times round the neck.

There were, I think, two factors in the cause of delay. First, the strength of the cord; second, the placenta occupying the inferior strait with the body of the child.

I will be under obligations for an explanation how there can be, in any case, a retained placenta prior to delivery of the child.

*The Hot Pack in Puerperal Eclampsia.*—Dr. Brens (*Archiv für Gynäkologie*, vol. xix., 1882) believes that for the cure of puerperal eclampsia either in the puerperium or the last months of pregnancy, active diaphoresis alone, induced by a hot bath, 40° to 45° C., followed by the pack, is all sufficient. The bath must not be prolonged over half an hour, and two to three hours suffices for the envelopment in the pack. This method properly carried out will, according to Brens, also cause œdema and albuminuria to disappear without interruption of pregnancy. —*Medical Record.*

# Hospital Practice.

## EDINBURGH ROYAL INFIRMARY.

### Seven Cases of Removal of Large Uterine Fibroids at the Vaginal Junction.

Reported by Skene Keith, M.B., lately House-Surgeon to the Clinical Surgical Wards.

In the new infirmary, two small rooms, each containing two beds, are set apart, under my father's care, for the surgical treatment of ovarian diseases. I had charge of these wards for the first eighteen months down to the end of September last. Along with ovarian cases, a large number of uterine fibrous tumors of all kinds came or were sent for operation. Of these, some were pediculated fibrous outgrowths, and were, surgically speaking, tempting cases for removal. None were, however, interfered with, on the ground that such growths in no way endanger the life, and rarely even affect the comfort of the patient. In seven cases, the tumors were so large, or were causing so much inconvenience, or were rendering life so useless from excessive and ever recurring hemorrhages, that removal was recommended. Some of these operations were tedious, difficult, and laborious. In some the convalescence was long and doubtful.

Case I. Mary C., aged 28, was sent by Dr. Robertson, of Ardrossan. She had sought relief in many quarters in vain. The tumor was very large, and was first noticed five or six years before. She was wasted about the chest and arms, like a case of old ovarian disease. The abdomen measured forty-nine inches at the umbilicus; the tumor was firm and solid throughout. The ensiform cartilage was turned upwards, and the growth extended under the sternum and ribs; close to the sternum, there was a large projection, the size of a child's head. No trace of the ovaries could be detected. The greater part of the pelvis was occupied by the tumor. There was no distinct cervix, only a small triangular projection drawn away to the left side, almost beyond reach of the finger. For several years no great inconvenience had resulted; menstruation was never in excess, and, for the last fifteen months, it had entirely ceased; since then, the increase in the tumor was rapid, and she could do little or nothing, owing to its weight. She sat all day knitting. At twenty-eight, her life prospects were anything but bright.

For obvious reasons, this patient was not taken down to the large

theatre, but was operated on in the ward, on April 18th, 1881. Sulphuric ether was given. Every possible antiseptic precaution was taken. The spray was large, and embraced not only the patient, but the operator and assistants. Not a sponge nor instrument was allowed to pass beyond the fine spray-cloud which fell without the slightest current. The sponges, thirty in number, had been lying for a long time in a five per cent. solution of carbolic acid, then washed in hot water, and then put in a two per cent. solution, and wrung almost dry. These were used over and over again, and were not washed in any fresh solution during the operation. Dr. Wilson was present from Glasgow, and there were about twenty visitors and students. The first incision measured twelve inches; it terminated four inches above the pubes, so as to avoid the bladder, which was known to be elevated on the tumor. On the right side, the broad ligament rose as high as the crest of the ilium. The left broad ligament was largely spread over the half of the tumor as high up as the ribs. The opening was then enlarged to twenty-two inches, and, by dint of hard pushing and patience, the huge mass was slowly moved forwards as far as its connections on the left side would permit. The right ovary was easily seen. On searching for the left, it was found to be transformed into a long tense umbilical-like cord, seven or eight inches in length. Here and there along this tense band were several small cysts. It was so imbedded in the tumor, that it could never have been removed. The right broad ligament was transfixed by soft iron wires, secured, and divided; all bleeding from the tumor side was prevented by a series of strong looking forceps. The fibroid was now more easily dealt with. It was drawn forwards, so as put on the stretch its enormous connection on the left side. About a dozen powerful looking forceps, ten inches in length, were now applied to the broad ligament before and behind. The whole was then cut downwards, and the mass enucleated as low as possible. A strong soft iron ligature embraced the base, which was of great thickness. The tumor was then cut away, the stump showing a section of the cervix in the centre. The forceps were removed one by one, and all bleeding vessels separately tied. Some of these were large, and one threw blood over the assistant's head. There was much trouble in finding some bleeding points amongst the loose cellular tissue of the huge gap now left. The hemorrhage was mostly venous. All present could see that this condition was full of danger, and that secondary hemorrhage into this loose tissue was not one of the smallest risks of this operation. When all oozing seemed to have ceased, the stump (the thickness of the leg) and the end of the right broad ligament were secured, with much tension, outside; a glass drainage-tube was fixed in above the stump, and the wound closed by forty silk sutures. The operation lasted one hour and three-quarters. After much blood and serum had escaped from the tumor, its weight was 42 lbs.

Ten hours after operation, five ounces and a half of syrupy blood were removed from the pelvis through the tube. The pulse was 94; the temperature 102.2°, rising, two hours later, to 103.4° Fahr. During the night, back-pain was relieved by injections of morphia. The first day was passed fairly well. In the evening, the pulse was 126, and the temperature 102.2°; flatulence was troublesome. She felt weak, and had whisky and water to drink. There were four ounces of bloody serum from the tube. On the third morning, the pulse was 120, and the temperature 104°. On the fourth day, the pulse was 114 to 125; and the temperature from 101° to 103.5. On the fifth day, after a restless night, the temperature had risen to 106°; it fell to 104°, and again in the afternoon it rose to 105.5°. There was œdema of the labia, and much cellular infiltration in the pelvis. She looked very ill during these days, not caring for food, but taking stimulants freely; on the sixth day, the pulse dropped to 92, and the temperature also fell to 101.6°. The tube was removed, there being only a tablespoonful of reddish serum in the pelvis. On the ninth day, the wound was found healed throughout. The stump was dry and sweet. The pulse and temperature almost normal. In the third week, there was again a rise of pulse and temperature from 101° to 103°. This continued for ten days, and caused some anxiety. On the eighteenth day, the wires were loose, and were removed. The loop was two inches and three-quarters in diameter. Seven weeks after operation, she left the hospital. She is now a strong woman again, in perfect health, and can do anything.

Case II. Mrs. B., aged 39, was transferred from Professor Frazer's wards in the medical house. Since the birth of her last child, three years before, the tumor had rapidly increased. It now reached the ensiform cartilage, completely filling the abdomen. Menstruation was frequent and profuse. Projecting from the vagina were four distinct swellings; prolapsus of the vaginal wall and bladder, prolapsus of the rectum and posterior vaginal wall. Between these were two large ulcerated swellings, like two fists, exuding a fetid discharge. These are found to be the lips of the cervix, enormously enlarged. Behind this and pushing outwards was the tumor, completely filling the pelvis. These local wrongs had thoroughly broken down her health. Her life was utterly useless, her condition in every way most miserable. She was a nervous excitable person, bedridden, feeble and emaciated. She was willing to run any risk to obtain relief. The case was far from a promising one, and, at first, the condition of the kidneys seemed to forbid any interference. The urine was of low specific gravity, 1012. The daily quantity passed during the week before operation varied from 80 to 100 ounces. There was a little albumen, but nothing else.

The operation was performed on November 13th, and lasted one hour and twenty minutes. The incision was eighteen inches long. This

opening was scarcely large enough, and much force was needed to push the tumor forwards, and especially to dislodge and bring up the pelvic portion, which was tied down by bands of adhesion everywhere in the pelvis. The steps of the operation were the same as in the previous case. The broad ligaments were stripped off and secured separately, and everything fixed in the lower angle of the wound. On proceeding now to remove the clots from the abdomen, a cystic tumor of the right kidney, as big as a child's head, was brought into view. It was pushed under the ribs by the tumor, and, as the operation went on, it came lower and lower into the abdomen. It was covered by adherent mesentery, and was of a very dark color. It was not examined too curiously. The weight of the tumor removed was 21 lbs. She looked very ill on being placed in bed. Indeed, at this stage, she presented a very hopeless appearance. The interest of the case now centered in the state of the kidneys, and in what would be the probable effect of the carbolic acid spray on such a damaged organ. Soon after operation, she was seized with severe pain, which was relieved by draining off a pint and a half of limpid urine, slightly albuminous; in eight hours fifty-three ounces were passed. The first night was fairly good with an opiate. In the morning the pulse was 104, and the temperature 101.8°. Fifty-seven ounces of urine were passed during the day, making 110 ounces in twenty-four hours. It was clear, with more albumen. The second night was bad. In the morning, she was flushed, and intensely cyanotic; the pulse was 134, and the temperature 101.2°. The urine was smoky, and towards evening it became bloody, and was loaded with albumen. The quantity was fifty-seven ounces during the day. She complained of intense headache, and was flushed and restless all day; the pulse was 130, and the temperature 101°. The third night was also bad; in the morning, the pulse was 128, and the temperature 101.4°; the urine was very bloody. The fourth and fifth nights were also restless. The urine still contained much blood, and some clots caused much distress in passing from the urethra. On the sixth day the urine was free of blood, but loaded with albumen. On the next day, there was a return of the hemorrhage, with much pain. On the tenth day, blood was observed for the last time; then came a week of great exhaustion from diarrhœa; and on the twenty-third day all trace of albumen had disappeared. There was free suppuration round the stump, though the wound healed well. She went home seven weeks after the operation, looking clear and healthy. She was freed from all her troubles. The vaginal and rectal prolapsus had disappeared. The cervix was tucked up under the pubes. Strange to say, the kidney-tumor has as yet—now more than a year after the operation—caused no inconvenience, though it has slightly increased in size.

Case III. M.V., aged 29, a field-worker from Inverness-shire, was admitted in April, 1881, with an uterine fibroid reaching to half-way

between the umbilicus and ensiform cartilage; it filled the pelvis, and pressed so much on the rectum and bladder that much of the patient's time was spent in passing urine. There was a short small cervix. The sound entered six inches. Both broad ligaments were involved. Menstruation was profuse. At one time, she was a strong powerful woman. Of late, she had lost flesh, and became much depressed, finding that she could no longer make her living, and having no friends to fall back upon.

The operation was performed on May 3d. No carbolic spray was used. A free opening was made, and the tumor pushed out. When the pelvic portion was got up, it seemed as if it would be impossible to secure this tumor by any extra-peritoneal method—the base being of great thickness, and extending across an enormous pelvis. The broad ligaments were very voluminous, and the ovaries (the size of hen's eggs) were drawn high up, and to the back of the tumor. The bladder required separation downwards. Then the broad ligaments were secured by wire ligatures, twisted tightly, and detached from the tumor, a strong wire being first passed under the pelvic portion. The tumor was then cut away, and, with great tension, the stump was brought into the wound, though it could not be secured there till a large clamp was adjusted over the wire. This made the drag excessive; and, but for the large broad pelvis allowing the stump to be depressed very deeply, the stump could never have been secured outside. The broad ligaments were also fixed to the clamp, and the wound was closed. The operation lasted an hour. The weight of the tumor was 15 lbs.

There was vomiting for the first thirty hours, and large opiates were required. The highest temperature was 100.6°, and that only on one occasion. The highest pulse was 82. Recovery was uninterrupted. The tension was so great that the clamp, four inches in length, gradually forced itself through the tissues, till it became buried out of sight, except a small portion in the centre, which was the only part visible at the end of the second week. Yet there was never the slightest constitutional disturbance. A very large cavity was thus left when the clamp was removed, and cicatrization was not complete for eight weeks. She left the hospital on June 24th. She had quite recovered her health, and she weighed 13 st. 12 lb. when she went away.

Case IV. M.D., aged 37, had been under observation for four or five years, with a large bleeding fibroid. The cavity was nine inches in length, and everything in the way of remedies was tried in vain. The conditions in the pelvis were so unfavorable that no interference was recommended. She got gradually more and more anemic and feeble, till she could no longer find employment as a cook. She was friendless and her means were exhausted. She was admitted into the hospital in August—more to give her rest and good food, than

with the view of trying anything to effect a radical cure. She got worse instead of better, and was even more blanched than before. The effect of the good living seemed only to cause more blood to flow from the uterus. There was a constant drip going on, varied every now and then by a real hemorrhage. As she had still ten years or more of invalidism to look forward to, at the best, her position was explained to her, and she agreed to anything being done that might be deemed feasible. The tumor reached two inches above the umbilicus. It was softer than any of the other cases—more so now than at any previous time, for it was well drained by long-continued bleeding. There was no cervix, and the mass filled up Douglas's space nearly to the anus. The operation was done on October 26th, after a residence of nearly three months in the hospital. She had long suffered from a chronic laryngitis, and the ether inhalation was difficult. It was agreed to remove the ovaries, should they be removable; for great doubts were entertained as to the possibility of removing the pelvic portion of the tumor. A free incision was made, the ovaries could not be found, and the tumor was turned out. The ovaries were found high up and behind. They were much enlarged, adherent, and imbedded in the midst of enormous varicose veins. They might have been ligatured close to the tumor; but then the pelvic part of the tumor, which was got up by much pulling, could never have been replaced again. The case looked pretty hopeless at this stage, and it was evident that great enucleation would be necessary before the wires could be placed under the pelvic portion of the tumor. The bladder came half way up upon it, and the base was as thick as the thigh, more than filling the opening of the pelvis all round. The bladder was first detached. The peritoneal covering of the tumor was divided by scissors, right across, a little below a point corresponding to the situation of the umbilicus before the tumor was disturbed. Then each broad ligament was ligatured by soft iron wires, and detached from the tumor, strong-locking forceps controlling all bleeding. The separation was continued by the scissors all round till the top of the vagina was reached, when a serre-nœud was applied as low as possible. The tumor was then cut away, all bleeding in the pelvis was stopped, and the stump secured in the wound. The tension was not greater than in the previous cases, while the tissue embraced was smaller. There seemed to be nothing held by the wires but the top of the vagina. The operation lasted one hour and thirty-five minutes. The weight of the tumor was 12 lbs. No spray was used during this operation, and the sponges were simply wrung out of hot water.

For the first week there was laryngeal irritation, followed by slight bronchitis. Still, considering her feeble condition, convalescence was unusually rapid. The opening left after the wires dropped off, was not larger than that in an ordinary clamp ovarian operation, not a trace of

cervix could be felt by the finger. The vagina ended in a simple *cul-de-sac* close to the cicatrix in the abdominal wall. The whole organ was removed.

Case V. A young woman, only nineteen years of age, was transferred from Dr. Angus MacDonald's ward and admitted for operation on April 24th, with a fibrous tumor extending midway between the umbilicus and ensiform cartilage. She was of a healthy family. The tumor was first noticed when she was seventeen. Menstruation had all along been painful and profuse, and there was a persistent pain in the left groin. She was anemic, and feeble from excessive hemorrhages. She was allowed to go on till the day before menstruation was looked for, by which time she had somewhat regained strength, and had so far got over the loss of the previous period. This operation was remarkable only for its simplicity, and lasted little more than half an hour. It was possible to include both ovaries and cervix in an ordinary clamp. The ovaries were much enlarged and diseased. The tumor weighed 9½ lbs. The cavity of the uterus was large and full of fungosities. Recovery was uninterrupted.

Case VI. Mrs. D., aged 46, a Frenchwoman, sent by Dr. Thomson, of St. Hilliers, was admitted in August last with a very large fibro-cystic tumor. Dr. Thomson had aspirated in various places without getting more than two or three drachms of fluid at any point. The serum always coagulated in the syringe. Since menstruation passed away, the growth of the tumor was rapid, her size having doubled within the last twelve months. She had applied for relief at various London hospitals.

She was a little woman, thin and worn. The tumor uniformly distended the abdomen, elevating the ribs; no movements could anywhere be detected. The cervix uteri was very hard; it lay low in the pelvis to the right side, and was quite fixed. The upper pelvis was occupied by the tumor, and it felt very hard on pressing upwards; no movement of the abdominal portion in any way affected the part felt in the pelvis. Posteriorly, and better felt by the rectum, was a hard cystic body, of the size of a small orange. This was supposed to be one of the ovaries. In prospect of an operation, the state of the parts in the pelvis was far from satisfactory, and repeated examinations threw no light on it.

*Operation on August 28th.* The incision was gradually extended to twenty inches, and the tumor was slowly pushed toward the opening. By taking time it moulded considerably, but could not be brought out on account of its extensive connections. It arose from the left side of the uterus, pushing aside the layers of the broad ligament, and forcing everything before it as it grew, so that the descending colon was found on its right side; only about two-thirds of the tumor had a peritoneal covering, the rest required to be separated from its cellular attachments. The separation was begun by dividing with the scissors the serous covering at

the edge of the colon, which was pushed over to the right side of the abdomen. Large vessels were secured by locking forceps; and, when the tumor was turned out, the iliac vessels, the psoas muscles and the loose cellular tissue, nearly as high as the diaphragm, were lying quite bare; there was nothing like a neck or pedicle. A temporary ligature was screwed tight, as low down as possible, and the mass cut away. Nearly an hour was taken in stopping bleeding, and in hunting out vessels amongst the numerous thrombi that had formed everywhere in the cellular tissue. The base of the tumor could in no way be secured externally, and it was only by the use of special compressing clamps, which destroyed the elasticity of the thick uterine tissue, that ligatures could be used with any hope of keeping a hold. The uterus was divided obliquely. Some vessels were secured singly, but the greater part were tied in seven or eight portions with strong silk. The great difficulty at this stage was to avoid injuring the bladder, which was of great size, and was drawn up to the left on the abdominal wall. It was only by keeping in a catheter, and moving it about, that it escaped injury. It had already been separated from the tumor, and had got very rough handling. The gap left in the peritoneum was very large; the descending colon and sigmoid flexure were left lying quite loose. A drainage-tube was left in, and the wound closed. The patient, when put to bed, was cold and collapsed, the operation having lasted one hour and three-quarters. Clover's small inhaler was employed; one ounce and three-quarters of ether only was used. After drainage, the weight of the tumor was 34 lbs.

Recovery was long doubtful. The after progress contrasted greatly with that of those cases in which the extra-peritoneal method was carried out. The utmost vigilance was taken to prevent the stagnation of fluids in the pelvis; this was the more necessary, as the cavity of the uterus was opened, and the quantity of strangulated tissue was great. No very unfavorable symptoms appeared till the end of the first week. Fortunately, at that time, a collection of putrid blood-clot was detected and opened by using the drainage-tube as a probe and pushing it about in the proper direction. In the second and third week, the pulse and temperature were sometimes high. Little could be taken except stimulants; for a long time nourishment was given by the rectum, and the feebleness was sometimes great. Many silk-ligatures were washed away; the discharge, though never great in amount, continued for three months. Long before this she was up and going about. After a residence of nearly four months in the hospital she left for Jersey, the picture of health and contentment.

Case VII. Mrs. W., aged 40, sent by Dr. Black, was admitted in the end of April, 1882. She was married at 28, and had had six children, the youngest was under three years old. She was aware of the tumor

some years before this, when there were frequent floodings. After her confinement, these were profuse, and plugging had often to be resorted to. Two years before, she was a long time in the Infirmary under Dr. Angus MacDonald. Treatment by ergot, both hypodermically and by suppositories, were tried with little or no benefit. She was first seen by Dr. Keith two months before her admission, when she was recovering from an attack of hemorrhage which nearly proved fatal. As soon as she was able to be moved, she was admitted. She was kept in bed, was well fed, and gained strength rapidly. Still she was so anæmic and feeble, that operation seemed hardly possible. At this stage, the tumor reached half way between the umbilicus and ensiform cartilage. There was a double systolic murmur, the heart having suffered from an attack of acute rheumatism in her youth. By the advice of Professor Frazer, operation was delayed. She was put upon a liberal diet, and iron was given in large quantity. After a time she went to the country. Examination of the blood showed only 50 per cent. of hemoglobin; hemocytes, 5,680,000; many of the red cells smaller than natural.

After three months and a half, she was again brought to the hospital. The hemoglobin was now 85 per cent.; hemocytes, 5,010,000; the red cells were now of a very uniform size. There had been no sign of menstruation for four months, and while her general condition had improved, the tumor had enormously increased. It had now pushed under the ribs and sternum, and there was a large projection on the right side, forcing outwards the loin and raising the ribs. Pain was now severe on the right side, and tension was great. She was confined to her bed, suffering greatly from facial neuralgia in addition to her other troubles. She had taken so much morphia at former periods of her illness, that opiates scarcely afforded any relief. The abdominal wall was œdematous all over. There were some swelling of the labia, and general œdema of the vagina and pelvis. After some weeks there was no improvement. The œdema and tumor seemed rather to grow every day, and, though the case was in every way an unpromising one, operation was advised as holding out the chance of saving life.

This was done on September 28th. The incision was upwards of twenty inches, and was as near the ensiform cartilage as was of any use. No line of demarcation could be made out between the peritoneum of the tumor and the wall; adhesion was everywhere most intimate. The tumor was then cut into without any better result, and bleeding was free. The omentum also came in between the tumor and wall, adherent to both; and, as all the tissues were œdematous, this only increased the difficulty. The wall was rapidly cleared off the tumor by the free use of the scissors. The transverse colon was firmly attached all along the upper margin; and, in separating this, it was deprived of its omentum and partly of its mesentery. Much force was necessary to tear out the

tumor, on account of the firmness of the adhesions everywhere. These were temporarily secured by every available pair of locking forceps, about forty in number. About seventy ligatures, partly of silk and partly of catgut, were left. The omentum was so lacerated that most of it was cut away. In some places the vascularity was great, especially where the bladder was separated downwards off the tumor. Finally, the stump was fixed in the lower angle of the wound along with both ovaries, and the incision was closed by thirty-five sutures. The peritoneum was so adherent to the tumor that it was nearly all stripped off the wall, and in places the intestines were in contact with the muscles when the wound was closed. The operation lasted nearly two hours. The weight of the tumor was 35 lbs., and on examining it after its removal from the body, it was impossible to separate the adherent peritoneum, even by careful dissection. Nearly the whole of the parietal peritoneum, and in places cellular tissue, remained on the tumor. No spray was used during this operation.

Very profuse perspirations followed the operation, and stimulants were freely given. By evening, she was quite warm. There was some hemorrhage going on, and, on removing the dressing, a large clot was found over the pubes and between the thighs, and three or four ounces of pure blood were removed from the pelvis through the drainage-tube. The discharge from the tube for some days consisted of almost pure blood. The tube was retained for a week, an unusually long time. Convalescence was slow, on account of her extreme feebleness, and the presence of some bed-sores which existed at the time of operation. The wound healed by first intention, and there was nothing unusual, except that there was more trouble from flatulence and distension, arising doubtless from the amount of intestinal adhesion to the wall.

An eighth case might be added, as the operation in no way differed from the others, except that the cavity of the uterus was not opened. The tumor was operated on as a case of fibroid. It was in reality a case of interstitial pregnancy at the full time. The fetus had remained in its bed for more than four years, and, two years before operation, a child was born alive at the full time. The sufferings of the woman had all along been, and continued to be, great, and it was in the hope of giving relief to the excessive pain that operation was advised. A healthy uterus and a heathy ovary were left. Recovery was rapid, and pain ceased with the operation.

Cases of removal of the ovaries to check the growth of bleeding fibroids, and a case of removal of the uterus by the vagina, will be reported in due time.

REMARKS.—The substance of the observations on the surgical treatment of uterine fibroids made at various times at the bedside, by Dr. Thomas Keith, was much as follows:

It is often said that the operation of hysterectomy is in much the same position now that ovariotomy was twenty or twenty-five years ago. It is not so. It never will be so. The natural history of ovarian disease and uterine fibroid is different. As a rule, ovarian disease is a merciless one. It goes on, and kills. As a rule, the active existence of an uterine fibroid is limited. It rarely interferes directly with life. When menstruation ceases, the troubles of the patient soon begin to pass away, while the tumor itself, after a time, becomes smaller, and in a year or two no trace of it is sometimes to be found. The patient gets along, lives more or less comfortably, generally not aware even of its existence, and dies of something else. Indeed, the preater proportion of fibrous tumors do not even interfere with a woman's comfort during the whole menstrual life. Patients become anxious about large growths, of the presence of which they were unaware till an increase of their size called the attention of their friends. But in a certain proportion—and that not necessarily in cases of large tumors—life is a long weary burden; a little respite is got only during the short interval between the periods, and often there is not even that. These unfortunates live on somehow—a burden to themselves and to their friends; but they rarely die from the tumor. The greatest immediate risk seems to be from hemorrhage, yet a death from this cause is extremely rare. Long ago, I was present at a *post mortem* examination of a young woman who had rather rapidly bled to death. Suspicions had arisen. There was only a large fibroid; the cavity of the uterus was large, and there was a crack in the surface-vein from which the fatal bleeding came. Except two cases of sudden death from embolism from inflamed uterine veins, this is the only time in which I have seen death directly result from an uterine fibrous tumor of a simple kind. Of the sarcomatous and malignant growths, I have seen many prove fatal. Indirectly, however, simple fibrous tumors, especially those of a large size, and those that bleed, may be a cause of death oftener than we think, for they seem to be often the fertile cause of paralysis from the anemia that they produce. Much may be done by proper treatment to carry the patient on to the menopause; and there is hardly a day in which I do not pass in the street women I have had as patients, who are now in perfect health, and whom years ago I have seen suffering and ill, in as bad and hopeless-looking a state as could well be. Then the submucous fibroids may be removed by a rough obstetrical sort of operation. Of these, I have taken away a great number, and only once had a fatal result. The patient was at the time suffering from septic fever—previous attempts having been made some weeks before to remove a very large tumor filling the vagina, and extending to the umbilicus. An inflamed mass of nearly six pounds was somehow removed, but the fever did not subside. The treatment of such cases did not, however, come into my department in this hospital.

A knowledge of the natural history of these tumors will thus help you much in arriving at a proper treatment of them. It is evident that the number to be treated by abdominal section is limited. If you have to think twice before advising a patient to have ovariotomy done, you must think fifty times ere you recommend her to have an uterine tumor removed in this way. In an advanced case of ovarian disease—be the local difficulties what they may—you can honestly encourage a woman to run any amount of risk. She has not much to lose; a few months only, it may be, of ever increasing suffering; and she may gain much by operation. It is quite different in the case of nineteen-twentieths of those who have a simple uterine fibrous tumor. These have many years of fair health before them; and even in the worst of them the chances are that they will live on—not in comfort, certainly, some perhaps in misery—but still they will live and not die. These have not much to gain by chancing a dangerous operation, and they may lose much having much to lose.

The cases in which I would sometimes advise operations are these. 1. In cases of fibro-cystic tumors. These often grow to an enormous size, and some of them go on growing long after menstruation has passed away, rendering life miserable from their size alone. 2. In very large tumors in young women, of which the first case is a good illustration. 3. In cases of large bleeding fibroids of any age, provided that the patients are not approaching middle life, and provided that the lives are practically useless, and that further experience in operation shall show that the mortality of hysterectomy be a small one. A mortallity of 50 per cent. ought to banish the operation from surgery altogether; so ought a 20 or even a 10 per cent. mortality. For my own part, considering everthing in connection with these tumors—and I have worked amongst them for five-and-twenty years—I should say that this operation is not justifiable if the mortality exceed 5 or 6 per cent. My present rate is one death in seventeen operations. Without the experience that ovariotomy has given me, I shrink from what the mortality might have been.

The new operation of removal of the ovaries and tubes to check the growth of uterine tumors promises well, if it turn out to be almost free of danger. Its proper field will be in cases of small or moderate sized bleeding tumors. When the fibroid is very large, this operation will rarely be applicable; for, if there be much adhesion, it will be no easy matter to reach the ovaries; and in certain cases even, when reached, it will be found that they cannot be removed at all. In about one-third of the cases on which I have operated, one ovary was lying imbeded in the very substance of the growth, elongated sometimes seven or eight inches. In most large tumors, the ovaries are enlarged, diseased, and useless; but in small fibroids, pregnancy is far from being an uncommon occurrence, and it is wonderful how little trouble the tumor causes, either during

gestation or at the end of it. I can recall only one accident at the time of parturition in which a large fibroid was present. Death took place with puerperal convulsions, and it might have been accidental; only absolute safety of operation will justify the removal of pediculated fibrous outgrowths, or removal of the ovaries, in patients over forty-five years of age. Some women are intolerant in anything wrong with their bodies, and are unwilling to wait even for a year or two. It is no easy matter to persuade some of them that you will do no operation, simply because no operation is necessary in their case. They are easily advised to the contrary, and it is no difficult matter to find an excuse for an operation, if the operator want to find one. If you do any of these operations in women approaching the menopause, or take away small fibrous outgrowths that have not given, and that will never give, your patient the slightest trouble, then you are simply surgical speculators, and speculators of the worst kind. The operation may be little to you; it is much to the patient. I fear we all sometimes forget the misery that any surgical operation costs the patient and friends—especially the severer ones, that directly risk life. May you never, in yourselves or in yours, experience what it is. But, whatever you do, never let the healthy enthusiasm of your youth tempt you into advising any operation, however small, that is not absolutely necessary; far less one that directly involves life in the very doing of it.

The removal of a large adherent uterine fibroid is one of the hardest operations in surgery, and some of them will try you to the uttermost ere you finish them in a proper surgical manner. It is not an operation with which to begin your surgery, though now-a-days many act as if it were so. If I chose to tell what I know of this operation; of mistakes of diagnosis, where there was no difficulty; of unfinished operations, that could easily have been completed; of wounded bladders; of deaths from hemorrhage, arising from the want of proper instruments, or from not knowing how to use them; and of, after all this, ignorance and self-conceit remaining perfectly satisfied—I am sure you would agree with me in thinking that, so far as hysterectomy has thus gone, it would have been better that this operation had never been.—*British Medical Journal.*

---

*Diabetes in Pregnancy.*—As has been shown by Sinety sugar may appear in the urine when milk is suppressed. Dr. Matthews Duncan (*Med. Times and Gazette*) has recently called attention to the fact that sugar may be present in the urine of pregnancy and also that true diabetes may occur which comes on only during pregnancy, and ceases on delivery or may come on after parturition. Four women out of fifteen, making twenty-two cases of diabetes, in pregnancy died. Nine out of nineteen diabetic pregnancies had unsuccessful issue.—*American Medical Weekly.*

# Reports of Societies.

## OBSTETRICAL SOCIETY OF PHILADELPHIA.

*Stated Meeting, Thursday, January 1st,* 1883.

First Vice-President, Dr. T. M. Drysdale, in the Chair.

### Death from Embolism.

*Dr. Wm. Goodell* reported the death of the patient from whom he had removed an myo-uterine fibroma. (Case reported by Dr. Baer, in the discussion on Dr. Drysdale's paper, at the meeting of December 7th, 1882). The patient had progressed favorably, but some weeks after the operation, while straining at stool, she had evidently loosened a portion of clot on the perineal side of one of the venous ligatures. It passed into the pulmonary circulation and quickly caused death.

### What is the Proper Management of the Bowels after Perineorraphy?

*Dr. Goodell* had recently operated, for the relief of lacerated perineum, upon an insane woman who had been sent to him for that purpose from an asylum. Her insanity commenced after labor, and was probably due to a complete laceration of the perineum extending two inches up the rectum. It had always been his habit to prevent any action of the bowels during the first week after the operation. This patient, soon after coming out from the influence of the anesthetic, tore off the bandage from her knees, removed the catheter, and by severe straining efforts secured a movement from the bowels. As she could not be controlled laxatives were given to secure liquid stools and avoid straining. The patient walked freely about the ward from the day of operation. The doctor expected the operation to be a failure under such circumstances; but, to his surprise, on removing the sutures he found that in the rectal portion and the important part of the perineum union had taken place.

His attention has been called by this case to the question of the advisability of keeping the bowels constipated after this operation. He intends to try the effect of laxatives in future cases.

*Dr. R. P. Harris* reported the case of a woman who, after the operation of perineorrhaphy, would strain, and her efforts at defecation opened the wound to nearly its original extent. In the second operation on the same patient the bowels were free and union was perfect.

*Dr. E. E. Montgomery*, after operating for lacerated perineum, does not use a catheter, but allows the patient to pass her water, as he does not consider healthy urine disadvantageous for a wound. He has been in the habit of using compound liquorice powder to keep the stools liquid. He has had good success in both primary and secondary operations upon the perineum when the rectum was involved.

The following members were then elected as

OFFICERS FOR 1883.

*President*, Dr. Richard A. Cleeman.

*Vice Presidents*, Drs. B. F. Baer and W. T. Taylor.

*Secretary*, Dr. W. H. H. Githens.

*Treasurer*, Dr. Alfred Whelen.

*Librarian and Curator*, Dr. E. E. Montgomery.

*Publication Committee*, Drs. John H. Packard, Elliott Richardson, James V. Ingham, B. F. Baer.

*Councellors*, Drs. R. P. Harris, L. D. Harlow, Wm. Goodell, T. M. Drysdale.

*Library Committee*, Drs. Horace Williams, D. M. Cheston.

*Committee on Proceedings*, Drs. A. H. Smith, E. E. Montgomery.

---

*Stated Meeting, Thursday, February 1st*, 1883.

The President, Dr. R. H. Cleeman, in the Chair.

*Dr. B. F. Baer* read the

ANALYSIS OF TWENTY-SEVEN OPERATIONS FOR THE RESTORATION OF THE LACERATED CERVIX UTERI WITH SPECIAL REFERENCE TO THE EFFECT ON STERILITY AND LABOR.

In the discussion which followed the reading of Dr. Playfair's paper on "Trachelorrhaphy, or Emmet's Operation," before the Obstetrical Society of London, on March 1, 1882, Dr. Herman, in the course of his remarks, said that "The American literature on the subject consisted mostly of general statements. Few writers had published cases, and the cases were mostly complicated ones." There is some force in these words. But, to avoid a monotonous repetition, it is desirable only to publish such as are strongly illustrative of the class to which they belong, or such as bear directly upon any point which may be under discussion.

In the *American Journal of Obstetrics*, for January, 1883, Dr. P. J. Murphy, of Washington, D.C., makes some "Observations on the Effects of Trachelorrhaphy on Fertility and Parturition," and comes to the conclusion "That repair of lacerations of the cervix uteri is usually followed by sterility." Now, there is no doubt of the truth of this state-

ment, so far as it goes, but I think he ought rather to have said that, in those cases in which sterility followed the operation, that condition also preceded the repair of the cervix in the majority of instances, either as a result of the laceration itself, or of its effects on the uterus and its appendages; and that the operation was not the cause of the sterility, but that it simply failed to cure it.

The only way to arrive at anything like a correct conclusion on this subject, is to take a number of cases (it need not be large), and analyze them, and this I purpose doing with mine.

Of the twenty-seven cases in which I have made the operation, six were either widows, or had reached or passed the menopause, and must therefore be excluded from the analysis. This leaves twenty-one cases to be reported upon in this inquiry. Of these twenty-one cases, thirteen had been sterile from five to sixteen years previous to the operation, and I think, for reasons which I will give farther on, that they ought also to be classed as beyond the probability of becoming pregnant. In the remaining eight cases, pregnancy had occurred within five years, but had resulted in abortion in five. In twelve of the twenty-one cases, from one to five abortions had occurred in each subsequently to the occurrence of the laceration. This gives abundant proof of the ill-effects of the lesion and its results, subinvolution, chronic hypertrophy, cellulitis, oöphoritis, etc., on fertility.

Is the assertion that sterility usually follows, as a result of the operation, correct? I do not think so; provided, of course, that the operation was properly made, that the os was not made too small, and that immediate union followed the coaptation of the parts, so that there was left the minimum amount of cicatricial tissue to interfere with the normal resiliency of the cervix.

The oftener abortion occurs, as a rule, the greater and more persistent will be the histological changes in the uterus and its appendages, which finally result in sterility.

The majority of cases in which the operation has been made have been of long standing, because the operation is new, and there were many old cases of so-called "ulceration" with chronic hypertrophy, waiting ready to be experimented upon with this as they had been before with many other old and new remedies.

Is this last new remedy followed by any greater success than the old in the reduction of the size of a large uterine body, which has become hard and fibrous from connective tissue hyperplasia? I think not; and hence its failure to cure sterility of long standing, from this cause. But, for the cure of certain cases of hypertrophy of the cervix, inflammation, ectropion and abrasion of the mucous membrane, with their local and remote symptoms, and possibly, even probably, preventing epithelioma, and in the more recent cases for the cure of subinvolution, abortion, and sterility,

the operation is an immense stride in advance of the old way of destroying the tissues of the cervix by amputation, or by the application of the hot iron or the potential cauteries. It is an advance, because it restores the cervix instead of destroying it.

The following case proves, I think, that abortion may result from laceration of the cervix, although none of the usual inflammatory consequences of the lesion are present:

Case I. Mrs. M.L., æt. 30, consulted me in January, 1881. She was delivered of her first child two years previously. The labor was rapid. The child was fully developed and vigorous. There was nothing unusual in the puerperal period, and she seemed to be well. Ten months after the birth of the first child she became again pregnant. Between the second and third months of gestation the product of conception was expelled with little pain, but was followed by severe hemorrhage. Within three months she was again pregnant, and aborted at about the same time and manner as previously. This was followed within six months afterwards by a third pregnancy, and abortion under similar circumstances. The last occurred about two months before she consulted me. She had absolutely no symptoms of uterine disease, such as leucorrhœa, menorrhagia, and the pain which always results from congestion and hypertrophy of the uterus; and expressed herself as feeling as well as ever she had in her life. There was no evidence, whatever, of syphilitic infection, either in the patient herself or in her husband. They are both robust and well developed.

*Examination.*—The perineum and vagina were normal. The uterus was in normal position; it was neither congested nor enlarged; but the cervix was lacerated on the left side to a point beyond the vaginal attachment, apparently approaching and involving the fibres of the internal os. On the right side there was a mere fissure only. There was no hypertrophy, eversion, or abrasion of the mucous membrane. The sound passed to a depth of two and a half inches. I expressed the opinion that the lacerated cervix and the abortions stood in the relation of cause and effect; and I advised an operation for the restoration of the torn cervix.

On March 10, 1881, I denuded the surfaces, being careful to remove very little tissue, and to freshen the edges as far up towards the internal os as possible. I then placed six carbolized catgut sutures, and clamped them with shot. I used the gut suture here in preference to the silver wire, because, as the cervix was not large, and the tear principally unilateral, there would not be much tension, and for the additional reason that I especially did not want any cutting of the tissues by the sutures, which is more apt to occur when wire is used. Another advantage of gut suture is that the line of union need not be disturbed by the removal of the stitches. On the seventh day after the operation I inspected the cervix through Sim's speculum, and found the sutures all *in situ*, though

they were partially absorbed. Union was perfect. Two days afterwards the shot were lying loose in the vagina. There had not been the slightest discharge from the united surfaces since the operation.

On June 3, 1881, the patient reported that she had not menstruated for seven weeks, and there was every indication that she was pregnant. A week later I was requested to visit her. I was much chagrined to find when I arrived that she had aborted. This was very discouraging, but I found some comfort in the character of this abortion. More pain attended the expulsion, and less hemorrhage followed it than on the previous occasions. This I ascribed to the restoration of the symmetry of the cervix, and its better retentive power.

On October 9, 1881, she reported that she was about two months pregnant, and feeling well; and on May 7, 1882, she was delivered at full term of a fully developed healthy boy, after a perfectly normal labor of six hour's duration. Examination two months afterwards revealed not the slightest laceration of the cervix. The mother and child are both well.

Case II. Mrs. M.R., æt. 21 years, consulted me in May, 1878. She had been delivered eight months before of her first child; the labor being tedious, was terminated with the aid of the forceps. The puerperal period was also tedious, and she had ever since been troubled with pain in the hypogastric and lumbar regions, together with a profuse leucorrhœa. Coition was painful, and followed by slight hemorrhage. She was anemic, and had lost flesh.

*Physical Exploration.*—The perineum was slightly lacerated and the vagina relaxed. The cervix uteri was pressing low down on the pelvic floor, and lacerated bilaterally, but to a greater degree on the left than on the right side. The tissues were soft from engorgement, and the mucous lining of the cervical canal greatly hypertrophied, everted, and abraded of its epithelial covering, so that it bled on the slightest touch. The uterine body was likewise congested and tender. The sound gave a measurement of minus three inches.

I treated this patient locally and constitutionally for almost a year, with marked general improvement, and although the local condition would improve, the benefit was only temporary. On April 30, 1879, I made the operation for lacerated cervix, placing seven silver sutures. Perfect union resulted.

Three months after the operation she became pregnant, and was delivered spontaneously at full term. The labor was so easy that delivery occurred before the arrival of the physician. Two months after the labor she called at my office, at my request, and I found the cervix healthy, although there was a very slight fissure on the left side. She stated that she had been well since the operation.

Case III. Mrs. A.B., æt. 34 years, was sent to me in July, 1880.

She had had eight children, the youngest of which was six months of age. She stated that she always menstruated during lactation, and became pregnant when her children were about eight months old. Since the birth of the last child, she had had metrorrhagia every three weeks, lasting one week, and a profuse leucorrhœa for years. She complained of pain in the lumbar region, with a heavy dragging sensation in the pelvis and on the top of the head. She was emaciated, and so pale that she appeared bloodless. She had become hysterical.

*Touch.*—The perineum and vagina were very much relaxed. The cervix uteri was far back, and presented a nodular surface, the result of three deep rents in its tissue, one of them extending through the centre of the anterior lip, flush with the vaginal junction. There was marked ectropion of the mucous membrane, with abrasion. The body of the uterus was anteverted, and only slightly larger than normal.

I placed this patient upon the "rest treatment" of Dr. S. Weir Mitchell (modified somewhat to suit the circumstances), in addition to the necessary local treatment. Her improvement was very marked, and on October 10, 1880, three months after she first came under my care, I operated for the laceration, and secured immediate union.

Under the date of October 27, 1881, a year from the date of the operation, I find this note in my case-book: "Returns to-day at my request for examination. She has improved so much in appearance that I scarcely knew her, and she states that she has been well since a short time after the operation. The cervix is perfectly normal, and gives no evidence that an operation has been made."

I recently received from my friend, Dr. Wm. L. Taylor, the following note concerning this lady:

"DEAR DOCTOR: In answer to your inquiry regarding Mrs. B., I will state that she was confined six weeks ago. The labor was natural, and if it differed in any way from her former labors, it was more rapid. I examined the cervix to-day, and found the external os patulous, but no laceration."

CASE IV. Mrs. X. was sent to me by my friend, Dr. Duffield, of McConnellsburg, Pa., in September, 1880. She was aged 35, had had seven children and two abortions, the last one nine months before. She complained of pain in the lumbar region, a heavy dragging pain in the pelvis and very difficult and painful locomotion. These symptoms had been growing in severity for several years; she also had menorrhagia and leucorrhœa.

*Touch.*—Cervix large, soft and lacerated bilaterally flush with the vagina. Mucous membrane engorged, everted and eroded. Uterus retroverted but mobile. The sound passed three and a half inches.

On February 27, 1881, I closed the rent, placing seven sutures, union immediate. The result on the symptoms was all that could be desired.

A letter received a few days ago, in answer to one of inquiry from me, informed me that this lady is now pregnant.

Here are four cases, in which pregnancy followed the operation, out of the class of eight in which impregnation had occurred within five years previous to the restoration of the cervix. And that there will be more I feel sure, because a sufficient time has not yet elapsed since the operation was made, in some of my cases, to prove that sterility will continue.

That sterility does not result as a consequence of the operation, when the proper precautions are taken to secure immediate union and a normal sized os, does not this analysis prove? That it will prevent a recurrence of abortion, and cure sterility of recent date, Cases I. and II. give undoubted evidence. That it will fail to cure sterility of long standing, for reasons given in this paper, I am convinced from my own experience. Time, however, may prove that a small percentage of this class will also be benefited in this direction.

I have selected the following case from the class of thirteen in which sterility had existed more than five years prior to the operation, as strongly typical of the point I wish to illustrate, viz., that the longer the time which has elapsed between the occurrence of the injury and its repair (pregnancy being absent during this time), the greater and more permanent will be the changes in and about the uterus, which almost necessarily result in a continuance of the sterility after the cervix has been restored.

Case V. Mrs. M.R., æt. 39, consulted me in the fall of 1880. She had had six children, the last one thirteen years before. Her labors were all normal, so far as she knew, except the last. This was complicated by a malposition. The forceps were applied two hours before the delivery of the head, and great traction effort was necessary. The child was so injured by the forceps that it died on the third day after delivery. The patient was unable to be out of bed for nearly three months afterwards, and the bloody lochia continued during two months. She had suffered from menorrhagia ever since, and recently from metrorrhagia every two weeks, at times amounting to "almost a flooding." In the intervals between the hemorrhages, she had a constant and profuse mucous leucorrhœa. She complained of a deep-seated pain in the pelvis, "sawing" in character, with pain in the sacral and lumbar regions and across the shoulders. Coition could not be tolerated because of the pain it induced, and the hemorrhage which resulted.

*Examination.*—The perineum showed an old laceration of slight extent, and within an inch of the vaginal orifice the finger came upon a large mass of tissue which filled and distended the tube. It was hard and nodular around its border, but softer and rather friable in its centre; and it bled on the slightest touch. It gave me, at first, an impression of epithelioma, and I could readily detect that the cervix was bilaterally lacer-

ated down to the vaginal attachment. The body of the uterus was hypertrophied, indurated, retroverted and slightly fixed from contraction of the broad ligaments. Through the speculum the cervix was seen to be lacerated, as the finger had indicated, and that the softer tissue, which occupied the space between the separated lips, was redundant mucous membrane, which seemed to have united from side to side, leaving a very small opening in the centre, corresponding to the external os. This tissue was dotted all over its surface with whitish spots—Nabothian cysts. The sound passed to a depth of minus four inches, and showed the uterine cavity to be rugous—vegetations of the endometrium. I now punctured the retention cysts, and found that the redundant tissue between the torn and separated lips was riddled with them. So much hemorrhage resulted from the scarification that, to check it, I was finally compelled to tampon the vagina. On the next day I removed the tampon, and found the mucous membrane much reduced and less congested.

I treated this lady during a number of months for the purpose of relieving symptoms, and preparing the parts for an operation on the cervix. The hypertrophy and congestion of the mucous membrane of the cervix, and uterine cavity were considerably reduced, the metrorrhagia and leucorrhœa diminished. The uterus become more mobile, and tenderness subsided; but the parenchyma of the cervix and body of the uterus remained sclerotic and unreduced in size.

On February 10, 1881, I closed the rent after denuding the surfaces, and dissecting away a large amount of cicatrical tissue from the sides and angles. I placed eleven silver sutures. Considerable difficulty was experienced in passing the needles through the dense and tough cervix, and I broke and bent several before I succeeded in placing all the stitches. The surfaces did not unite as readily in this instance as is desirable, but union was finally established by granulation, resulting in the formation of a good cervix.

This patient has been entirely relieved of the leucorrhœa and pain of which she complained, but she still has an occasional menorrhagia, and the body of the uterus remains large and hard, the sound entering three and a half inches. As was to be expected under these circumstances, she has remained sterile, but certainly not as a result of the operation.

Dr. Murphy further says: "I fear I shall never arrive at that perfection where it will be given me to appreciate why a laceration of the cervix, by being repaired, will probably prevent cancer of the womb."

I do not wish to discuss this subject here, as I am preparing a special paper upon it, but I would like to say that, if we believe that cancer may develop in consequence of the changes in the circulation and nutrition, which necessarily follow when the cervix is torn, and it seems to me that one need not have arrived at perfection in the art of appreciation to believe that cancer might develop in a field such as was presented in Case

V. previous to the operation, then restoration of the organ ought to prevent cancer.

He also concludes, "That the character of the labor is unusually severe and protracted, and that, in a large percentage, laceration occurs a second time.

That this statement is too sweeping is abundantly proven by the cases I here record. I can believe, where pregnancy has happily followed the operation in a case of long standing, in which the cervix is sclerotic from connective-tissue hyperplasia, and cicatrical from non-occurrence of immediate union, that the first stage of labor might be tedious, and that relaceration might take place. But, suppose relaceration does not occur in some cases, is that sufficient reason to deprive the patient of the benefits which usually accrue from the operation independent of pregnancy?

Not long ago I made the operation for the restoration of a lacerated perineum, which extended fully an inch and a half up the recto-vaginal septum, on the person of a lady fifty-one years of age. The laceration occured twenty-six years before with a severe forceps labor. She had been debarred from the society of her friends, and made loathsome to her husband as well as to herself all these best years of her life. In answer to my inquiry why she had not sought relief long before, she replied that she had done so, but that she had been advised to wait until after the menopause for fear that, in the event of parturition, the parts would relacerate! Comment on such arguments as that is unncessary.

The comfort which this lady has enjoyed since the rectum and perineum have been restored, causes her to feel far from kindly towards the gentlemen who advised such conservatism.

I have recently delivered two ladies on whom the operation for lacerated perineum was made about three years ago, one by Dr. Goodell, and the other by myself. Relaceration did not occur in either.

DISCUSSION.

*Dr. Githens* stated that on June 18th, 1878, Dr. A. H. Smith had operated upon Mrs. M. for the restoration of a lacerated cervix; and on July 10th of the same year had performed perineorraphy, both operations proving successful. On June 19th, 1879, a year and a day after the first operation, I delivered her of a boy at full term, the labor being uncomplicated and easy, and no tear of either cervix or perineum occurring.

*Dr. E. E. Montgomery* remarked that as regards the question of sterility resulting as a consequence of the restoration of a lacerated cervix, he had been operating since 1879 and five of the patients he had operated upon have since become pregnant. The first patient upon whom he operated became pregnant lately, but aborted; as she had desired not to become pregnant and was anxious that an abortion should occur, he believed that it had been artificially induced. Another patient operated upon in 1880 had been delivered in January 1883 without accident. A

patient operated upon in 1879 is now four months advanced in pregnancy; before the operation she had aborted at three months; this accident was apparently consequent on the existence of the laceration. Of these five cases, two were lacerations of long standing and three were recent.

*Dr. Cleemann* had operated upon on case of nine years' standing. During the first two years of that time she had two miscarriages, and then remained sterile for seven years. The operation was performed eleven months ago, and she is now two months advanced in pregnancy.

*Dr. A. H. Smith* had heard Dr. Baer's paper with pleasure. The general impression in this city is that sterility is a consequence of the injury, and a large proportion of the cases operated on by him have soon become pregnant after operation. The fear of the recurrence of the accident prevents pregnancy in many cases, as means are used to avoid that condition. Improved general health and local comfort are a result in a majority of the cases even where pregnancy does not occur.

He would like to hear Dr. Baer's experience about the existence of obstinate nausea in pregnancies after operation upon long standing cases accompanied with an enlarged and hardened condition of the cervix. It has been so with him. As regards the results of labor, there has been no tendency to relaceration in same position. He uses inhalations of chloroform and hot water douches in such cases, and does not rupture the membranes early; he also prevents the patient from bearing down, and by these means secures a slow and safe labor. He is sorry to hear that Dr. Baer has no confidence in the power of the operation to reduce the size of a hyperplastic uterus. He has seen cases of the so-called sub-involuted uterus, after the complete failure of local means, such as iodine, silver nitrate, etc., reduced to one-third of its bulk by operating upon a laceration of the cervix. The rapidity with which the ultimate result of reduction in size is reached is in proportion to the time that has elapsed since the injury.

When the cervix is much hypertrophied and ectropium exists, such a cervix as would formerly have been called cancerous and would have been amputated, the stitches should be left in a long time. If they are removed too soon there is a proneness to gaping, a sort of ectropium or sprouting. This will not happen if the sutures are allowed to remain thirty or forty days.

*Dr. Wm. Goodell* regrets that he was too late to hear Dr. Baer's paper. With reference to the question of the influence of the operation on causing sterility he thinks it does have such an influence. He has operated in one hundred and sixty-nine cases and has only known of seven who have since become pregnant. There were probably more as the cases have passed away from his knowledge and he has never heard of them again, as he does not practice obstetrics outside of the Preston Retreat. In two of the seven cases a second operation was required but it was slight. In

one case not the slightest change occurred in the form of the os. As regards the effect of the operation in preventing cancer he believes it fully both from experience and from *a priori* reasoning. He has seen but two cases of epithelial cancer in women who have not borne children. In fact his experience has been that the greater the number of children, the greater the liability to carcinamatous degeneration, and often the notch of a previous laceration is seen in the cancer. If carcinoma is, as we believe, a local disease at its beginning, what more probable cause could we have than such an irritating sore as a bad laceration of the cervix. In more than one case his principal reason for operating for the restoration of the cervix has been on account of a history of cancer in the family.

Concerning the effect of the operation upon hyperplasia he believes with both Dr. Smith and Dr. Baer. There is an element of passive congestion, the result of the irritation of the laceration, and when the cause is removed by the operation the effect passes away and a great reduction in the size and weight of the uterus is secured. He believes that preliminary treatment in cases of enlargement with ectropium has a very great effect upon the results of the operation. Applications of iodine, glycerine and tannin, and use of the very hot douche, and cross-hatching of the enlarged nabothian glands, have a softening and calming effect. In such cases if the hard, gristly triangle in the apex of the wound be carefully excised the tension on the stiches is slight. He generally removes the sutures in about nine days after the operation, in one case in consequence of circumstances affecting convenience they were allowed to remain three weeks. When he can secure easy approximation and close coaptation, which is readily done by means of his guiding thread, perfect union is more probable than in any other plastic operation. For his sutures he uses the finest possible silver wire, drawn to order.

As regards the results of the operation, on various symptoms that were supposed to arise from the presence of the injury, he has experienced the greatest success and great disappointments. In some local treatment would have answered every purpose. The most expensive present he ever received from a patient was from one on whom he had performed this operation and relieved, by it, a morbid mental condition that had lasted for years, with great local distress and inability to walk any distance or to stoop over in packing a trunk.

*Dr. A. H. Smith* knows well the value of preliminary treatment and employs it faithfully, but there is a limit to the endurance of a patient, she cannot be kept too long upon her back and it sometimes becomes necessary to operate before all that is possible has been accomplished. In some cases there is an unavoidable tension and in others a friable condition of the tissue which is benefited by leaving the stitches in position. He allows the patient to attend to her domestic duties with the sutures *in situ*. In his experience there has been no relation between the

number of children and the tendency to carcinomatous degeneration. Such growths have been in women who have had but one or two children only. Cancer of the mammary gland is most common in sterile women or when children have been few. He has rarely seen cancer in its early stages in an enlarged cervix with ectropium but on the contrary in unnaturally small cervices.

*Dr. Wharton Sinkler* has three patients who have been operated upon for lacerated cervix, one of them by Dr. Goodell. All of them have since become pregnant.

*Dr. Montgomery* remarked that one sixth of the cases he had operated upon (within four years) had since become pregnant. He thinks Dr. Smith's suggestion an over true one. As the injury was the result of pregnancy the risk must not be run again. In the Philadelphia Hospital he has found cancer of the uterus most common after numerous labors. The same rule has held good in mammary cancer. It has been most common after frequent nursing. Uterine hyperplasia is reduced by operating on the torn cervix. He has operated with this result in view in cases of so-called subinvolution. Dr.—— divides the cervix and removes a wedge shaped piece, reuniting the wound, as a remedy for this condition.

*Dr. H. Beates* has performed twenty-three operations and has had two pregnancies since. He has had under his care seven cases of uterine carcinoma and in all of them cervical laceration co-existed. The number of children varied from one to several.

*Dr. Baer* in closing the discussion remarked that in answer to a letter of inquiry to the husband of a patient upon whom he had operated to restore the cervix he received one in return in which the idea of another pregnancy was scouted with disdain. He had not observed that more nausea was present in pregnancies following the operation, but he had not had a case of long standing in which pregnancy had occurred as yet.

He thought Dr. Smith agreed with him fully regarding reduction in size of an old hyperplastic uterus whose muscular element has been replaced by connective tissue when he says that "the rapidity with which the ultimate result of reduction in size is reached is in proportion to the time that has elapsed since the injury". That is exactly the position Dr. Baer took in his paper but he believes that the change in the parenchyma of a connective tissue uterus to be exceedingly slow, if at all. The reduction in size occurs in the cellular tissue around the organ.

Sutures were removed in from eight to twelve days: he thought they ought to be removed as soon as union was solid because he believed that they had an irritant action after that time. If that action is desired then they might remain but that was returning to the old idea of the seton and to a certain extent the operation then ceased to be a plastic one.

# Abstracts and Selections.

## I.—OBSTETRIC.

*Extraction of Teeth During Pregnancy.*—Mr. Henry Sewill brought forward this subject. Pregnant women were constantly applying for relief, but when extraction was proposed—it being evident that the tooth was past saving—one was met with the reply that the patient's medical man did not consider that it would be safe for her to undergo the operation; the patient continued to suffer, and her strength was reduced by the pain. His own opinion was that this was a prejudice very much on a par with the idea that it was wrong to extract a tooth during the acute stage of alveolar abscess; and his practice was, in the early stages of pregnancy, to give nitrous oxide gas and extract the tooth. In more advanced cases, one must be guided somewhat by circumstances; but even in most of these he believed that extraction did no harm. Even if the patient were weak and nervous, the slight shock of the operation did less harm than the exhaustion produced by long-continued pain. Messrs. F. Canton and A. Coleman said they had frequently been asked this question, and never hesitated to answer it in the affirmative. They preferred to give nitrous oxide in such cases, and took care to give it thoroughly. They had never seen any harm result from the extraction of teeth under these conditions. Mr. George Wallis never hesitated to operate in such cases when an operation was necessary. On one occasion he was called upon to extract a tooth for a lady who was very near her time, and the child was born within twelve hours after the operation; but the patient had previously been in great pain, and she had a much easier labor than she would have had with an aching tooth too add to her other troubles. Several other members spoke to the same effect.

We clip the above from the *American Medical Weekly*. Its original source is not credited, but it is evidently abstracted from the proceedings of some English medical or dental society.

It is our firm opinion, in which we are sustained by competent dental authority, that there are extremely few, if any, cases of toothache in pregnant women that will not yield to proper treatment, local and constitutional, without resorting to extraction. It is well known that caries of the teeth is especially liable to progress more rapidly in pregnancy owing to the demand for lime salts on the part of the fetus; and the prevention of this condition consists in the timely use of bone-making food—oatmeal,

graham bread, etc.—as for the other inflammatory and neuralgic affections of the teeth at such times, it seems far wiser to allay the pain and use temporary fillings until after delivery, and this is becoming more and more customary amongst dentists, in this country at least. The fact that extraction is still commonly practiced during pregnancy by English dentists is only another instance of the superiority of American over European dentistry.

---

*Premature Delivery for the Prevention of Blindness.*—By Edward Loring, M. D.

After detailing a number of cases in which albuminuric blindness, which was sometimes permanent, ensued during pregnancy, the author sums up his conclusions as follows:

1. That examinations as to the conditions of the eyes of pregnant women should be made much more frequently than they now are; and that these should be made in a routine manner, even when the patient does not complain of any disturbance in vision, since it has been discovered that about one-third, or thirty-three per cent. of those who have an organic lesion of the retina or optic nerve from kidney trouble, either have none, or make no complaint of any reduction of vision. This seems almost incredible to the general practitioner, but the old ophthalmologist has become only too painfully aware how often, and for how long a time, eyes may be affected with an inflammatory process of great intensity and yet give rise to no complaint on the part of the patient. Thus, a retinitis or a neuro-retinitis, which, in its primary stage, may exist, and often does, for months unsuspected by either the patient or physician, may lead, after a long interval, through the secondary or atrophic state to complete blindness.

From the fact that no complaint is made of any loss of sight until near the end of the pregnancy, it has been assumed that the trouble did not begin until that time. I am inclined to think, however, that, while this is no doubt true, especially of the cases of uræmic origin, there are very many cases, especially those dependent on albuminuria, in which the trouble really began long before; and that the eyes, if examined, would often have given evidence of disease long, oftentimes months, before the explosion took place which has cost many a mother her eyesight, and oftentimes her life, both of which, by a timely examination and a timely operation, might have been saved. I will even go so far as to say that evidences of albuminuria not infrequently show themselves in the eye before any manifestation can be had in the urine.

It will be said at once that it is requiring too much of the general practitioner or obstetrician to suppose that he shall acquire the requisite skill to use so difficult and intricate an instrument as the ophthalmoscope. That the ophthalmoscope in its widest sense is one of the most difficult

of the instrumnets used for the detection of disease is, I admit, perfectly true, as it is that few obtain a perfect mastery over it. But the same is true of the microscope. To one great microscopist there are thousands who daily use the instrument with the greatest success in the detection of disease, and it might, with a little attention, be the same with the ophthalmoscope. Much as I admire the high standard of skill which some of those specially trained to its use naturally acquire, nevertheles, I firmly believe that the sphere of its greatest usefulness, and therefore of its greatest triumphs, will one day be in the hands of the general physician, and especially in those of the obstetrician. Thus, Mr. Eales reports that a single physician was able to furnish him for examination, from a single hospital in Birmingham, twenty-eight cases of neuro-retinal disease from kidney trouble in one year, while out of 11,000 cases of general eye disease at the eye infirmary only four such cases were seen.

2. I would conclude that where a marked deterioration of vision has occurred, with or without ophthalmoscopic changes, and where blindness is threatened, premature delivery is not only justifiable, but often demanded.

3. When a permanent loss of vision has occurred from a preceding pregnancy, premature delivery in a subsequent one, when surrounded by its proper safeguards, is not only justifiable, but at times absolutely necessary, and that, further, when a loss of vision, either temporary or permanent, has once resulted from gestation, it is the duty of the family physician or obstetrician to explain, both to the wife and husband, that the cause of the trouble is a constitutional and not a local one, and that there is every probability of recurrence of the trouble in succeeding pregnancies which may lead, not only to the destruction of vision, but even to loss of life.—*N. Y. Med. Jour.*, Jan. 20, 1883.

---

*Transmission of Virulent Diseases from the Mother to the Fetus.*—The experiments of MM. Strauss and Chamberland (*Transactions de la Société de Biologie, Paris*) promise to be of considerable value. As our intimate knowledge of human pathogenesis must generally be the result of analogy, and only receive its substantiation from occasional clinical opportunities, these experimenters have commenced their researches on the lower animals. The report of the first series, details the question of the transmission of those diseases the cause of which has been proved to be a microbe or bacteride.

They find that in anthrax neither the tissues nor blood of the fœtus nor the amniotic fluid contain any trace of the bacteria. The passage of the bacillus through the placenta cannot take place at any time of the pregnancy. The mothers were enabled to live for several (four to eight) days, instead of only thirty-six hours, by the employment of an attenuated virus. Microscopic sections of the placenta and its attachment, colored

with gentian violet, showed a large accumulation of the parasites on the maternal side of the placental epithelium, whilst the fetal side was entirely free from them.

These experiments also prove that the relatively great size and complete immobility of the anthrax microbe often cause its accumulation in the smallest capillaries, and absolutely prevent its transit through the glandular epithelium of the special organs, so that its presence in the bile, urine, and milk can only be due to an accidental hemorrhage, whilst the äerobic quality of the bacillus forbids its entrance into the tissues.

This disease, then, offers an exception among the virulent diseases, as is shown by the other experiments.

The bacillus of symptomatic anthrax can, on the contrary, pass by the placenta and confer immunity upon the fetus, and, as is already known, freely penetrates the tissues.

Chicken Cholera.—In the experiments on the rabbit, all the tissues and the products of secretion were found impregnated. The vesicles of Graaf proved as virulent as the blood. Owing to the season of the year in which these experiments were undertaken, enough impregnated fowls could not be obtained to determine with certainty if the eggs were also virulent when passing by the oviduct.

Septicemia.—The septic vibrion of Pasteur was chosen for these inoculations; these pass the placenta less readily than the virus of the two former.

Though the microbes of anthrax cannot pass from the mother to the fetus, the reverse transmission was clearly demonstrated. With a capillary trocar, virus was injected into the fetus of guinea-pigs, which are easily accessible, and after the short period required for the propagation and increase of the microbes the mother in every case became affected. The autopsy then showed the curious anomaly of a virulent mother and one virulent fetus while all the other fetus were healthy.

Perhaps the future perfection of these studies will aid in solving the theory, which has been so much discussed, of the syphilitic infection of the mother without direct inoculation.—*Philadelphia Medical Times.*

---

*A New Sign of Pregnancy.*—The *American Journal of Obstetrics* says that Jorisenne (*Arch. de Tocologie*) has furnished a sign by which we can diagnose pregnancy during the first two months. Starting with the assumption that in pregnancy there is a hypertrophy of the heart (and this assumption, if erroneous, will not affect Jorisenne's results), he has found that, while in health there is a variation of from ten to twenty beats in the radial pulsation, according as the body is upright or horizontal, in pregnancy, no matter what the position, the beats number the same. Jorisenne has been able to diagnosticate pregnancy as early as the first month, when no other sign except the missing of a menstrual period was

present. When examining a patient for this sign, it is necessary to proceed with deliberation, first counting the radial for the space of fifteen seconds while the patient is standing, then sitting, then reclining. The order may then be reversed, and uniformly the same number of beats will be recorded. Jorisenne promises an explanation of this phenomenon in a future paper.—*Canada Medical Record.*

---

*Pathogeny of Varicose Ulcers.*—Ulcers are frequent enough on varicose limbs, but in Dr. Quénu's opinion (*Revue de Chirurgie*, November, 1882) varicosity alone does not suffice the ulceration since many persons reach the last degree of varicose ulceration without at any time suffering from ulceration, while others suffering from much less varicosity present deep, extensive and rebellious ulcers. Drs. Terrier and Séjournet have already called attention to the troubles of sensibility which precede often the very moment of the ulceration and recognize the existence of nervous lesions. Dr. Quénu claims that the state of the peripheral nervous system should be taken into account in judging pathogeny of varicose ulcers, and has made many examinations of peripheral nerves adjacent to varicose ulcers and found them diseased. In six cases of simple varicose ulcer, taken at random, he has found nervous alterations, often extensive in character. The nervous trunk is increased in size, but the interstitial neuritis is limited to the perivascicular tissue, and rarely involves the primitive nerve bundles. Dr. Quénu believes that these changes are not secondary to the inflammation developed by the vicinity of the ulcer. The neuritis is not an ascending one, having its origin in inflammation of the nerve filaments in the vicinity of the ulcer. In his opinion these nervous lesions precede the ulcer and are independent of it. The pressure of the varicose veins influences the production of the lesions of the nerves and these in turn, through their trophic influence produce the ulcers.—*American Medical Weekly.*

---

*Kubaseoff on a Case of Double Uterus and Vagina, Diagnosed during Life.*—In the *Medizinski Westnik*, Dr. Kubassoff, of St. Petersburg, describes the case of a patient under his care, the subject of this montrosity. She was a young woman, twenty-four years of age, well nourished and well formed, and had been married six months when she first consulted him from irregular menstruation and dysparunia. On examination, the orifice of the urethra was found to be unusually near to the clitoris, and somewhat to the right of the median line; the commissure of the labia were well developed, but the frenulum and the fossa navicularis were wanting. From above the urethral opening, and a little to the left, a thick fold of skin passed backwards to its posterior cammissure, and laterally this fold was continuous with a hymen covering, on each side, a vaginal orifice. The right hymen had been freely ruptured, the left was

intact and was ring-shaped (Hymen fimbriatus, Luschka); the finger could only be introduced with difficulty; the left constrictor vagina alone appeared to be contractile. The right vagina was capacious and smooth; the right cervix inclined to the left, and its os externum was round and narrow, but admitted the sound, which passed into the cavity of the uterus to the distance of seven centimeters. The left vagina was narrower, with distinct rugae; the left cervix was also conical, and turned to the left; the os externum was very small, admitting with difficulty a special fine sound for six centimetres. When both sounds were introduced into uteri, they were found to lie farther from each other the higher they were passed. On rectal and bimanual palpation two uterine bodies, separated by a cleft, were detected. The right uterus was the larger, and was bent forwards and to the right. The uteri menstruated separately. Before marriage, the patient had menstruated regularly from the age of seventeen, at intervals of four full weeks; since marriage, severe menorrhagia had set in. A sister of the patient, married for nineteen years, is sterile; a second sister died of post partum hemorrhage, after sixteen years of sterility with dysmenorrhea.—*London Medical Record.*

---

*Some Observations on the Bladder During the Early Puerperium.*—Dr. Halliday Croom, after describing the relative positions and relations of the bladder and uterus in the early puerperium, proceeded to point out the influence which filling of the bladder exerted on the uterus. Firstly, he drew attention to displacement of the uterus upwards and backwards, taking exception, however, to the term displacement, and showing that the word displacement did not exactly convey a correct impression of what actually took place. He admitted that a certain limited ascension of the whole organ occurred, but that the real heightening of the fundus was the result of the bladder as it filled straightening the uterus, and so throwing the fundus higher up, and that the backward displacement of the uterus resulted from the intestines falling down between the uterus and the anterior abdominal wall, rendering the organ thus less easily palpated. He drew attention to the experiments of Autrefage and Depaul with the hysterometer, which supported the opinion that the alteration in the uterus was not a displacement of the entire organ, but a real heightening of the fundus. Reference was then made to the normal lie of the uterus, which the author showed was generally believed to be right lateral; but from the observations made by Börner, as well as his own, he was inclined to believe that the normal lie of the uterus was central, provided always the bladder and rectum was completely empty, and the patient flat upon her back. He then showed that the second effect of the bladder filling was to cause or increase this lateral deviation of the uterus, and he pointed out that the ordinarily accepted opinion as to the right deviation of the uterus with a full bladder, was not borne out by his own

observations. He showed that the frequency of left lateral displacement of the uterus was much more common than was generally believed, and he attributes this to the fact that the bladder distended naturally to the right side during the early puerperium, and that for two reasons :—First, because of the natural right asymmetry of the bladder of the parous woman, and second, because of *antepartum* conditions, namely, that during pregnancy the bladder spreads out more to the right side than to the left, owing to the left occipito-anterior posititon of the head. The right deviation of the uterus he attributes to—first, the natural lie of that organ during pregnancy; and, second, to the rectum; and, third, to the accident of position. The third effect of the distended bladder was to affect the rotation of the uterus, increasing the rotation where it already existed, and, in cases where the uterus was tranverse with an empty bladder, bringing it about. He drew attention to these displacements being more common in the early than in the late puerperium—firstly, because of the relatively greater diuresis; secondly, because of the greater frequency of retention of urine; and, thirdly, because of the greater mobility of the uterus. In conclusion he alluded to some figures with regard to the amount of urine required to bring about these position changes, holding that while twenty to thirty ounces of urine caused these changes under certain circumstances most markedly, that these changes are not proportionately increased with double that quantity of urine.

Professor Simpson thought the paper well worthy of careful consideration, but was not very clear as to the rotation of the uterus mentioned by Dr. Croom. The uterus is twisted differently in the pregnant than in the non-pregnant state.—From Obstetrical Society of Edinburgh *Medical Press.*

---

*Ulcerative Cervical Catarrh During Pregnancy and its Treatment.*—Skejelderup (*Tidsskr. f. prakt. Med.*) states that when a woman, who has passed through a former pregnancy or pregnancies without trouble, suffers from nausea and pain, the condition of the uterus should be examined. In many cases a chronic cervical catarrh will be found. This may have existed before the pregnancy and simply be aggravated during the time. If not treated it often continues to confinement and heals during involution, or it may remain unchanged. For treatment, S. uses the mitigated stick (equal parts of caustic and nitre). The stick must not be long enough to reach into the cavity of the uterus. As a rule, ten or twelve applications are sufficient to produce a cure. Daily injections of warm water (24° to 25°) Reamur) may be used with benefit, and the external genitals should be bathed with warmer water. S. gives the details of three cases illustrating his statements. An abstract of one of them is as follows: A woman, twenty-seven years of age, in the third month of her second pregnancy, suffered from nausea, pain in the back, cold extremities and

general uncomfortableness. An ulcer was found on the neck of the uterus, covered with a thick mucus. After five applications of the mitigated stick, all unpleasant symptoms disappeared, and the pregnancy then passed normally on to a favorable termination.—*Physician and Surgeon.*

---

*Cantilena on Pilocarpin in Puerperal Eclampsia.*—The author narrates a case to which he was called in consultation. The woman, a primipara, was confined in the morning, but was unconscious with attacks of eclampsia. During the latter part of gestation she had been ill, had slight edema of the extremities, and albuminous urine. Leeches had been applied to the mastoid processes, bromide of potassium given by the mouth and by rectum, and the ice-cap applied to the head. Dr. Cantilena gave little hopes of recovery, but suggested the trial of pilocarpin by hypodermic injection. The first injection of two centigrammes of the chloro-hydrate was given in the evening, the second five hours afterwards. Abundant perspiration and salivation, with marked general improvement, ensued. The injection was repeated twice on the succeeding day. The woman made a perfect recovery.—*London Medical Record.*

---

*Ptomaines in the Amniotic Fluid.*—The existence of ptomaine has been demonstrated in the amniotic water. The fluid, obtained by puncturing the membranes during labor, was subjected to chemical examination by Mourson and Schlagdenhauffen, by whom the fact was reported recently to the Academy of Sciences at Paris. If the toxic character of this ptomaine shall be established, it may serve to explain some cases of miscarriage which may be caused by its presence in abnormal quantity. [As ptomaines have been shown to exist in normal urine, possibly the pseudo-alkaloid here may rest with the fœtus rather than with the mother. —*La France Médicale.*—*Philadelphia Med. Times.*

---

*Piccinini on Assafetida as an aid to the Better Development of the Fetus.*—The author refers to the works of Laferta and Professor Giordano, and the recent writings of Cazzani on this subject. He states that he can confirm their conclusions as to the good effect of assafetida, having administered the drug with great advantage in several cases. In the discussion which took place on his paper, in which many gynecologists took part, all agreed in attributing to assafetida the property of preventing abortion, especially where there was no taint of syphilis; over which it has no influence.—*London Medical Record.*

---

## II.—GYNECIC

*Observations upon Mammary Tumors, based on an Analysis of Thirty Cases in Practice.*—Read before the Clinical Society of Maryland, Jan. 5, 1883, by L. McLane Tiffany, M. D., Professor of Surgery, University of Maryland, and published in the *Maryland Medical Journal.*

The following observations are presented for the consideration of the Society, not as proving anything, for the number of cases is too small to generalize from, but as suggesting lines of thought or treatment.

The number of cases is thirty, of which I find notes more or less copious, and of these, twenty-seven were white, three were mulattoes; of the latter class, one was dark, the others quite light-skinned. Mammary tumor in the full blooded negro is extremely rare as compared with the Caucasian race.

All the patients were female.

The tumors classified anatomically are:

| | | | |
|---|---|---|---|
| Cystic, | 2 | Sarcoma, Spindle cells, | 2 |
| Fibroid, | 3 | Sarcoma, round cells, | 2 |
| Papilloma, | 1 | Cysto-Sarcoma, | 2 |
| Adenoma, | 3 | Carcinoma (Scirrhus) | 10 |
| Adeno-Sarcoma, | 1 | Carcinoma-Sarcomatodes, | 1—26 |
| Adeno-Carcinoma, | 1 | Not noted, | 4 |

Clinically classified, there are malignant seventeen, benign nine, taking malignant to mean a tendency to infect distant parts through the blood or lymph channels, and to recur in situ after apparent removal.

Of the first class—benign—the eldest was forty-six years, the youngest eighteen years. Of the latter class—malignant—the oldest was seventy-nine years, a negress, with a recurrent scirrhus, the original tumor having been removed four and a half years previousiously, the youngest thirty-seven years, a mulatto, and a white woman having each a carcinoma at this age. From which it would appear that simple tumors are met with at an earlier age than malignant ones. Injury, a severe blow was the alleged cause in two cases—a sarcoma and a carcinoma-sarcomatodes. Mastitis was the alleged cause in two cases, the inflammation having occurred many years before, during lactation—one sarcoma, one carcinoma. In one case, the breast not invaded by carcinoma had been the seat of abscess during lactation, and in subsequent pregnancies failed to secrete milk.

Hereditary tendency is shown as follows: One sarcoma, had a brother who died of carcinoma of the tongue; one fibroid, aged eighteen, had a mother from whose breast a fibroid was removed, also at the age of eighteen.

Six benign, tumors were single, and three married, with one child each (two not noted).

One adeno-sarcoma, aged eighteen, was unmarried, and one carcinoma-sarcomatodes, aged forty-five. All other malignant tumors occurred in married women: of these, two were sterile, the others had 7, 7, 5, 6, 6, 6, 1 children. One patient is credited with several children. It would appear, therefore, contrary to the prevailing idea, that a family rather predisposes to the occurrence of malignant tumor.

Menstruation was absent in one aged seventy-nine, irregular in one aged fifty-one, regular in all the rest—a somewhat remarkable showing, since among the rest are sixteen aged between forty and fifty. It is a possibility that late menstruation may predispose to mammary growths, and seems worthy of notice.

The age of the patients, together with the type of growth, was as follows, when applying for treatment:

Fibroid, 22, 28, 46 years; all small, not more than half an inch in diameter. Twenty-two years had three tumors not larger than peas, situated at the periphery of the breast; the two others, 28-46, were near the nipple.

Retention cysts, aged 24-45 years; the latter of these had the other breast removed three years before being seen by me. The breast presented similar appearances to the one removed by me. The family physician is responsible for this statement.

Papilloma, aged eighteen years; an exquisite example, situated in one of the larger milk ducts.

Adenoma, 45-38-28; in no case more than inch in diameter.

Sarcoma, 45-45, married, with families; carcinoma-sarcomatodes, 45, single; adeno-sarcoma, 18, single.

Carcinoma: Scirrhus, 37, 40, 43, 43, 45, 45, 45, 47, 51, 79; adeno-carcinoma, 37.

The time elapsing after discovery of the growth before applying to me for treatment was as follows: Fibroid, five years, one patient; the two others said "a long time." Papilloma, "a long time." Adenoma, many —one year—a long time. Retention cyst, two years—eighteen months.

It would appear that the benign tumors grow slowly; not so, however, with the malignant.

Sarcoma, eight months, involving three-fourths of a large breast, cystic. Sarcoma, ten months, a tumor the size of a closed fist, solid. Sarcoma, seven months, a tumor, two by three inches.

Adeno-Sarcoma, two years, a tumor, four inches by three.

Carcinoma, Scirrhus, two years, a tumor, three by three and a half inches. Carcinoma, Scirrhus, twenty months, operated upon and returned, at time of second operation being a flat growth the size of a small saucer. Carcinoma, Scirrhus, one year, three inches by three

inches. Carcinoma, Scirrhus, eighteen months, Carcinoma, Scirrhus, one year, involving entire mamma. Carcinoma, Scirrhus, fifteen months, size of small orange.

It may be noted that of malignant growths the sarcomata are the most rapid. It may be noted that medullary carcinoma appears in my list.

The breast affected is noted in the case of nine benign tumors, five being in right breast, four in left.

Sarcoma is credited to left breast four times, to right breast once.

Carcinoma, to left breast eight times, to right breast four times. Malignant growths occurring, therefore, in the left breast twelve times, in the right breast five times, a proportion which may be modified by a larger number of cases.

The skin, glands in axilla, and pectoral muscle, were involved in no case of benign tumor.

Of five cases of sarcoma the skin was involved in three, the pectoral muscle not at all; axillary glands once slightly, from irritation probably rather than the disease.

Carcinoma: One case showed infiltration of mamma, implication of skin, axillary enlargements and also under pectoral muscle; all within one year from discovery of tumor. Another showed a similar condition of things after twenty months. A tumor two inches in diameter was present in each of two cases without skin or axillary implication after one year of growth.

One growth existed five years and began to increase rapidly three months before being seen by me; the skin was not involved, but there were sixteen enlarged glands in the armpit. A similar history belongs to another patient with the addition of skin implication.

Of twelve carcinomatous patients five had axillary tumors. Implication of great pectoral muscle was present in two recurrent and four primary cases. The wall of the thorax was involved in one case. The skin was involved in seven cases.

Local complications in order of frequency are adhesion, pectoral-muscle adhesion, axillary glandular enlargements, and lastly implication of thoracic walls. An open ulcer was present in one case where an incomplete operation had been attempted, the wound never closing.

Dimpling of the skin over a carcinoma is seen only when much integument is involved and indicates extensive infection. Connection with the pectoral muscle is made out by causing the arm to execute certain movements, the tumor being grasped meantime in the fingers. Always great movement can be imparted to the growth across the muscular fibres, but not in the direction of their length, the great pectoral being tense.

The nipple was depressed in many and not able to be drawn out in any case of scirrhus.

Discharge from the nipple occurred where a growth was present in a

milk duct, papilloma, and in two cases of carcinoma containing small cysts.

Ulceration of the nipple, Paget's disease, was observed in one case; the raw surface had existed for several years and the nipple had entirely disappeared. The carcinoma following the nipple ulceration was situated in that part beneath the nipple and was in the form of a flat disk.

Treatment: All the cases were operated on and all recovered from the operation. In every case where glands in the axilla were felt, that space was freely opened and all tumors removed.

The direction of incision and its length varied with the size of the growth, its nature, its connections.

The benign tumors were easily removed through a single incision, and require no special comment. Not so the malignant growths. Here not only the neoplasm, but the area of infection surrounding it required removal; so cutting was correspondingly free, over-lying skin and subjacent muscle were extirpated without stint and the armpit cleaned from all visible glands. These latter might not be recognized by touch through the skin, and yet the microscope showed plainly carcinoma after removal. Axillary growths are removed safely and expeditiously by the fingers rather than the knife, thus obviating bleeding from small vessels. I have repeatedly emptied the armpit, so that the chest was cleanly exposed and the fingers could be passed up under the clavicle; so far I have found no accident follow this procedure, nor is healing retarded. I have not made great efforts to close the wounds after removal of a breast, but have brought the edges as near each other as possible without great tension; for this purpose I use silver wire, not sticking plaster, and do not remove the wire for ten days or more unless inconvenience is complained of. Iodoform lightly sprinkled on the wound, a drainage tube in the armpit, and a compress of absorbent cotton held in place by a bandage constitutes the dressing. This is not disturbed until some reason for so doing is apparent, and then only so much of the cotton is removed from the lowest part of the wound is necessary for cleanliness and good drainage. The axilla heals promptly, the site of the tumor healing later. For several days the arm is carried in a sling, even though the patient occupy the recumbent posture, thus ensuring immobility of the cut region as much as possible. It is rarely necessary to change the first dressing after an operation before the tenth day and sometimes longer, even though the wound be left with edges some distance asunder. The wound is not washed, a little absorbent cotton sufficing to cleanse the surface when uncovered. Dry and infrequent dressings combined with rest and pressure constitute the treatment (Gamgee). When the wound has been mopped with chloride of zinc, I have found oakum dressing with occasional irrigation, by means of warm water, to give more rapid healing than a cotton dressing. The destruction of tissue following the use of

the caustic is sufficient explanation of the necessity for a different dressing. Adhesive strips assist the closing of the wound after the slough is cast off.

It has been said already that no case died as the result of operative measures; how about recurrence and permanent relief.

It is worthy of notice, that, of the cases of scirrhus-carcinoma, four had erysipelas. They were all stout and apparently healthy in all respects, acknowledging no ill-health of any kind; yet within six months the disease had recurred in two, one has not been heard from, and one has been operated upon too lately to take into consideration.

The erysipelas as a factor in producing rapid recurrence is to be considered; also whether or no a robust frame may not predispose to a more extensive area of infection thus rendering it more likely that the surgeon does not entirely eradicate the disease when operating.

Recurrent growths, when possible, I have removed, and I see no reason to doubt the propriety of the measure. Of course a diffuse growth which cannot be isolated should be treated with great respect, but recurrent nodules are to be treated by excision. The following case shows that advanced age need not prevent a secondary operation:

Case 1.—A. B.——, negress, aged seventy-nine years, was operated upon in 1874, left breast; in 1879, five years later, a small recurrent growth—scirrhus-carcinoma—was removed from the sternal end of the cicatrice. Recovery was rapid.

I have had the privilege of seeing in the practice of my colleague, Dr. Michael, a patient upon whom three operations in four years have been done for scirrhus-carcinoma; she is now in good health.

The most extensive operation for recurrent mammary cancer that I have done is the following:

Case 2.—Mrs. C——, aged thirty-seven, mother of seven children, youngest eight months, eldest thirteen years, had a tumor removed from left breast; the wound never healed. Tumor existed one year before being subjected to operation, which was done prior to birth of last child. I found an open carcinoma, small, adherent to chest wall, axillary glands enlarged and one or two large nodules under the pectoral muscle. Everything was freely cut away (in June) and the wound mopped with a sat. sol. of zinc chloride. Much sloughing followed; two inches of one rib, and as much of another came away. The floor of the wound rested on the heart, the beat of which was plain. August 1st the patient returned home. I heard from her several months later and she was doing well at that time.

That rapid growth need not prevent operation is seen from case three.

Case three.—Mrs. G——, aged forty-five years, mother of seven children. Had mammary abscess, left side, while nursing one child. She received a severe blow on the left breast and noticed a small lump in the

same region several months later. Ten months afterwards when seen by me, the mamma was the seat of an elastic globular tumor three inches in diameter. The mamma was freely removed and the resulting wound healed rapidly by granulation, the skin edges not being able to meet. Two months later a small gland the size of a large pea was removed by incision in the axilla. The patient is now well, ten months after operation, and has become stout.

In regard to permanent and complete cure: The test insisted on by Paget, and accepted by Gross, is ten years of immunity and health. It is to be regretted that I cannot adduce a single case complying with this requirement, but the reason is not difficult to find, namely, that but eight and one-half years have elapsed since my first breast excision, so I must plead professional youth in extenuation. I have not found it possible to learn the bodily condition of many of my patients. The following I have recorded and may be relied on as existing Jan. 5th, 1883: A scirrhus removed Feb., 1868: patient well without return. Scirrhus removed November, 1881; returned in situ and axilla by May. Scirrhus removed September, 1882; recurred in three months. A rapidly-growing sarcoma removed in March, 1879, recurred in one year, was removed and again recurred, causing the death of the patient one year later. A rapidly-growing sarcoma two inches in diameter removed February, 1881; patient now well without recurrence. A rapidly-growing sarcoma three inches in diameter; removed ten months since, now well. A carcinoma removed, recurrence took place in four and a half years; the growth was removed and patient continues well. A carcinoma being removed recurred in situ four years later; removed and patient recovered.

I have news of several of the benign cases, but being benign their future is of no importance. The malignant tumors operated upon during the past six months, nine in number, have scarcely had time to recur, and therefore, are left out of consideration, with the exception of the one removed in September, which is noted as having reappeared.

---

*The Treatment of Uterine Myomata by Ergot.*—The following abstract from an address by Henry O. Marcy, M.A., M.D., Boston, Mass., we reprint from the *New England Medical Monthly:*

A careful study of myomatous growths and their development leads to the general conclusion that such pathological conditions would, in a very small degree, be amenable to medication. The experience of the profession to-day, after the widest and more careful experimentation, teaches that we possess no method or safe means by which we may effect the absorption or disappearance of these tumors. The literature of the subject furnishes a large number of exceptional cases, where, following certain courses of treatment, cures have supervened. In this way remedies have been advocated, the further trial of which has resulted in

showing their utter worthlessness, even if not followed by injury to the patient.

Such diagnostic errors have doubtless had a share in producing hopeful conclusions, as in cellulitis with pelvic exudation, hematocele, etc. The remedy by far most widely used at present, and holding the first place in the confidence of the profession, is the *secale cornutum*, and no discussion of the treatment of uterine growths at the present time would be complete without a consideration of its value.

Hildebrandt published[1] a series of cases where exceptional results followed the subcutaneous use of ergot. This gave to the medicament and the method, as well as to the writer, a new and undue prominence. Dr. Atlee, in an essay already referred to, published in 1853, makes emphasis upon the use of ergot, and defines a wise limit to its usefulness. In his later publications,[2] Dr. Atlee states "that as early as 1845 I introduced the use of ergot in the treatment of uterine fibroids, and have ever since employed it. Ergot, no doubt, acts in two ways in influencing the nutrition of fibroids of the uterus; first, on the muscular tissue of that organ; second, on the capillary circulation of the tumor itself by constricting its smaller vessels. Notwithstanding this action of the medicine, I have never been so fortunate as to see a fibroid quietly diminish under its influence alone, although in many cases the size has been diminished, while in others no effect has been produced." In the same paper in the discussion of the treatment of interstitial fibroids, he says: "I think it best to use ergot periodically, and not constantly; employing it in anticipation of and during the menstrual periods, as there is a tendency for fibroids to increase in size in consequence of the greater determination of blood to the organs of generation, so there is a diminution in size after menstruation subsides. Hence ergot is calculated to act beneficially, when given in time, in arresting the supply of blood to the tumor, and yet we must not always attribute this diminution in size, which usually follows menstruation, to influence of ergot, as it is a natural physiological sequence."

Gusserow[3] states: "It is not to be gainsaid that in pure *myoma*, especially in those very rare cases which are situated, without a capsule, in the uterine substance, so great a disturbance of nourishment can be produced by the workings of secale cornutum upon the muscular tissue of the tumor itself, or of its surroundings, as Spiegelberg has especially noticed, that the tumor atrophies and disappears. Extensive experiments, however, have not been made in this direction. Hildebrandt has reported five cures, more or less complete, in twenty-five cases. With this exception there is not, as far as known, a single case in German or French literature.

1 Berliner Klin Wochenschrift, 1879, No. 24.

2 Treatment of Fibroid Tumors of the Uterus, Transactions of the International Medical Congress, Philadelphia, 1876

3. Loc. Cit., p. 70.

Dr. Byford[1] reports eighteen cures obtained by Drs. White, Goodrich, Howard,, Jackson and others. These statistics are rendered rather doubtful from the fact that Byford includes a case of Chroback as cured, which Chroback himself considers cured only in regard to its symptoms, the tumor being clearly distinguishable, even after a large portion of it had been removed. However, it must be granted that a number of complete cures have been accomplished by means of subcutaneous injections of ergotine. The liability of a mistaken diagnosis must always be taken into consideration in special cases of this sort. Even Hildebrandt suggests the possibility of an exudation instead of a tumor in his fifth case. It is a universal experience, however, up to the present time, that a cure can be counted on with only a slight degree of probability, this method of treatment being extremely uncertain. Should we succeed in placing the diagnosis of *myoma* in relation to its histological structure and its connection with the uterus upon a more exact basis than heretofore, the special cases may be indicated in which a good result from the use of ergot can be relied upon. From the various authorities which he quotes, we tabulate as follows:

| | | |
|---|---|---|
| Cases treated with subcutaneous injections of ergotine, | | 62 |
| Entirely disappeared, | 5 | |
| Improvement, | 27 | |
| No result attained, | 30 | —62 |

A. Kessler[2] reports one case with seeming good results, where he used in all ninety-five hypodermic injections of ergotine, usually daily, with only one abscess resulting therefrom. In a second case he repeated the use of the drug in a similar manner seventy-five times without abscesses, but produced thereby no effect upon the tumor.

The physiological action of ergot is of itself a most interesting study. (In the impossibility of giving here a proper discussion, we would refer those desirous of pursuing it further to Dr. H. C. Woods' excellent article in his work upon therapeutics.) There can be little doubt that ergot produces an increase of arterial pressure, which is probably from centric vaso-motor irritation. This of itself would effect a change in the nutrition of tissue, and to this has been ascribed much of the beneficial effects upon uterine tumors produced by its administration. It is obvious, however, that this effect could in no wise be peculiar to the circulation in a uterine growth, but must pertain alike to all parts of the body; and it would seem an equally rational deduction that to push the physiological action of the drug to an extent sufficient to effect materially the local nutrition of a uterine myoma, would endanger the safety of the entire organism.

It is very certain that the fibres in the coats of the blood-vessels are not the only non-striated muscles upon which ergot acts, and it is very proba-

1. Trans. American Med. Assoc., 1875.
2. American Journal of Obstetrics, 1882.

ble that the drug influences this class of muscular fibres wherever situated. Experiments show that the peristaltic action of the intestinal canal is increased by it. It has found its highest expression of effect upon the uterus in parturition; indeed, there can be no doubt but its effect is quite certain and constant upon the uterus in all its varying conditions of physiological activity. Probably it is in this, almost alone, that we find explanation of whatever of good, results from its administration for the relief or cure of uterine myomata.

Earlier we have presented the evidence which appears to us conclusive that only rarely do these growths exist without capsule, and that the vascular supply is circumferential and uncertain. The relation of nerve distribution in the growths themselves remains underterminded, and the stimulus to active contraction of the muscular elements composing the tumor is consequently unknown.

It is probable these growths are not altogether without nerve supply, and it would seem equally probable that active contraction of the muscular elements of the tumor itsself may be increased by the ergot, which plays a hitherto unsuspected role in the induction of molecular changes producing disintegration and absorption. Granting this to be true, abundant clinical evidence shows that it must be of itself an uncertain and minor clinical factor.

There remains to us only a comparatively limited class of cases where we may be certain of clearly defined results, namely, the sub-mucous growths. There, under the stimulus of ergot, contraction of the uterus aids in the expulsion of the tumor, which lies more or less within the cavity, and at least places it more nearly within reach of the surgeon. Faithful experimentation with ergot in all classes of uterine tumors for more than ten years, has given me little or no beneficial result save in this class of growths. Since the much-quoted experience of Hildebrandt, the drug has been widely used subcutaneously in the form of ergotine. It seems yet unproven, however, that, thus administered the results are different or better than when given internally. Much pain is produced frequently by its hypodermic administration, and deep and troublesome abscesses often follow.

Dr. Byford reports several cases where the use of the drug had to be discarded because of its unpleasant effects, and gives in detail a case of Dr. E. P. Allen, of Athens, Pa., where phlebitis of both extremities supervened. Gusserrow quotes a case of Lent where death followed from peritonitis.

Dr. Byford closes his interesting and instructive address, already alluded to, with cautionary observation "that ergot, in the treatment of fibrous tumors of the uterus, is a prompt and powerful agent, which cannot be recklessly used without great danger, and that much careful observation is still necessary to enable us to determine the circumstances

under which its administration is both safe and effective." Even Dr. Byford has failed to classify his cases as to the location and character of the growths under treatment; and a careful study of data from which he draws his conclusions shows that very many of his cases are vague and uncertain. We have spent much time in examination of the literature of the subject, hoping to make deductions as to treatment, of certain and definite character, from the immense mass of clinical records; but the greater portion is so indefinite that it is, in a large measure, worthless.

---

*Sutures in Gynecological Operations.*—Dr. James B. Hunter (*American Medical Weekly*) thus sums up the advantages of silver wire over all non-metallic sutures:

That it is perfectly clean and aseptic.

That by its rigidity it gives a desirable support to the parts while union is taking place.

That, being secured by twisting, it may, with the utmost nicety, be made to exert the precise degree of pressure desired, and may be loosened if it has been too tightly twisted.

That, by molding it with the point of the tenaculum at the points of entrance and exit, the exposed border of the suture may be made a straight line, from which the wire penetrates the tissues at right angles, and is, therefore, less likely to cut at those parts. Before thus bending the suture it is a circle. The latter form gives a better support to the parts, especially in operations on the perineum and vagina. It also presents itself in such a manner as to be easily seen and reached by the scissors when it is necessary to remove the sutures.

The writer, while not expressly claiming originality in the above described method of adjusting wire sutures, leaves the reader to infer what he chooses in regard to the matter. Although this method has been taught and practiced for several years to our knowledge, by Prof. W. H. Taylor, in the Obstetrical and Gynecological Wards of the Cincinnati Hospital, and is doubtless familiar to most of our local gynecologists, and it is a matter of sufficient practical importance to bear repetition and emphasis.

---

*Hæmophilia.*—Hemophilia is a very learned looking word, and, as it should do, it bespeaks a disease of which we know very little. The malady, which from time to time so unhappily incapacitates H. R. H. Prince Leopold, is one which most unprofessional people think to be due to some abnormal condition of the skin. A person who bleeds easily is said to have only one skin, in place of the proper number which it must puzzle many to tell. It is not, however, any such malformation, but what it is, is much less certain. Such persons bleed easily from not only the skin when wounded, but from the gums and mouth, and mucous mem-

branes. They also bruise easily, and in the same way it is probable that the troubles in the joints from which they suffer are to be explained by supposing some slight injury to the synovial membrane, and a subsequent escape of fluid to the cavity of the joint. We do not know what is the malformation or disease which predisposes to such an easy escape of the blood from its proper channels. The chemical constitution of the blood has been thought by some to be at fault, the smaller blood-vessels by others; but no chemist or microscopical investigations that have been conducted as yet have been anything but contradictory, and, therefore, have been without result. One curious fact, however, has been elicited from various observations that have been made; and this is, that it is hereditary to a marked degree, and that it is transmitted along the male much oftener than along the female line.—*British Medical Journal.*

———

*Achromatopsia in Hysterical Patients.*—French physicians and surgeons, as Charcot (*Progrès Médical*, Nov. 22, 1879, page 915), Landolt, and Galezowski, have paid particular attention to the subject of achromatopsy in hysterical patients. The following abstract of a communication by Dr. Paul Richer presents a fair view of the phenomena observed in this interesting class of cases. Dr. Richer tells us that Galezowski has shown that the amblyopia of hemianæsthetic hysteric patients is habitually accompanied by general or partial achromatopsy, and M. Landolt has laid down certain laws according to which in this sense perversion acts. Landolt believes that in a normal subject all parts of the field of vision are not equally apt to perceive various colors; in other words, the field of vision is physiologically more extended for some colors. Thus, blue has the greatest visual field, yellow coming next, then orange, red, green, whilst violet is only perceived by the most central parts of the visual field. Charcot recognizes numerous exceptions to the rule laid down by M. Landolt. In the patients on whom he experimented red was found to have the greatest extent of field, then in invariable order, yellow, blue, green, and lastly, violet. In hysterical amblyopia these characters of the normal state were modified. In a patient in whom red is in the normal state, the following phenomena are observed: The violet circle disappears, and the patient, distinguishing all other colors, is incapable of distinguishing violet, then progressively, green, blue, yellow, and finally red disappear. In the highest degree of hysterical achromatopsy all the colors cease to be perceived, the notion of form and design being preserved. The phenomena of the disappearance of colors have been the subject of the experiments of Charcot, in its connection with the influence of artificial magnets on general and special sensibility. A magnetized bar is brought near the temple of a subject suffering from general and sensorial anæsthesia, on the side of the achromatoptic eye, at a distance of one or two centimetres. In some seconds, or in fifteen or

twenty minutes, we can follow step by step the successive reappearance of colors in this eye, precisely according to the order indicated in the degree of the extent of visual field. Thus the color first appears in the field which offers the greatest extent of view, most frequently red, then in turn yellow, blue, green, and lastly violet. At the same time, the eye at first achromatoptic recovers the notion of color, but the other eye becomes affected in an inverse order. This is called the phenomena of transfer. But once transfer is obtained and vision of color restored to the achromatoptic eye, whilst it has disappeared in the sound eye, the experiment is not terminated; what are termed consecutive oscillations then occur. Whether the magnet be maintained or not in the first situation, the notion of various colors soon disappears according to the order indicated, commencing with violet and finishing with red in the eye primarily affected, and reappearing in the inverse order in the eye primarily sound. These phenomena oscillate from one eye to another for a variable length of time, the patient finally returning to her primitive condition.—*Medical Press.*

---

*The Glycerine Tampoon in Gynæcological Therapeutics.*—Dr. Hüllman gives his opinion of the value of the glycerine tampoon, after having used it for fifteen years. He thinks that its virtues are due mainly to its hygroscopic and antifermentative properties. If a pledget of cotton be soaked in glycerine, placed in the vagina, and pressed against the os, it will withdraw large quantities of fluid. This action continues according to the amount of moisture in the tissues, sometimes for twenty-four hours or even longer. In some cases, the withdrawal of the moisture goes on uninterruptedly; while in others it is now and then arrested. This may be kept up until sufficient depletion of the uterus and adjacent tissues has been secured. The secondary effects of the glycerine is increased fluxion in the uterus, vagina and adjacent tissues. Again the glycerine tampoon serves to keep the mucous membrane clean. From these causes result those changes which have been observed after the prolonged use of glycerine in different diseases of the uterus, vagina and pelvic tissues. Among these beneficial effects may be mentioned diminution in the size of the uterus, improved circulation through the tissues and consequent improvement in nutrition and the elimination of effete products.

This treatment is especially applicable in chronic metritis and catarrh or in case of ulcerated os and constant leucorrhœa. Under this treatment the enlarged and hardened organ becomes smaller and softer. The ulcers are kept clean and soon heal. The secretion of the thickened mucous membrane becomes smaller in amount and improved in kind. The atonic, enlarged uterus becomes smaller and firmer. The same is true of the relaxed uterus of the anæmic who have not borne children,

and of the atonic uterus after birth or abortion. A few glycerine tampons suffice to produce normal involution.

In *descensus uteri et vaginæ*, if not too marked or of too long standing, the most favorable results can be confidently expected from the glycerine tampoons; while in versions and flexions, their value can be only of secondary importance.

This treatment is also of benefit in vaginitis and vaginismus, especially when due to fissures, and the treatment may be a valuable adjunct in these conditions when they arise from dislocations of an enlarged uterus and consequent disease of the parts supplied by the nervus pudendus. The glycerine is of value on account of antiseptic properties also.—*Physician and Surgeon.*

---

*Hydatidiform Disease of the Chorion.*—Mr. Edward Stephens, M. R.C.S., of Ilminster, writes: "On September 7th, I was sent for by a midwife to attend Mrs. C., who was flooding. On my arrival, the hæmorrhage had stopped. On making an examination, the uterine sheath was not sufficiently dilated to be able to ascertain its contents. On passing my hand over the abdomen, I remarked to the midwife how unusually circular it was. On the following afternoon, I was again hastily summoned, and found the woman had lost much blood. On making an examination, I found that, by a little manœuvring, I could insert my hand into the uterus; and I vividly remember how astonished the midwife and Mrs. C. looked, when I informed them that it contained no child. In fact, Mrs. C. stoutly declared that she had felt the child many times; and that, being the mother of thirteen children, all living, she ought not to have been mistaken. After administering a full dose of ergot, some sharp uterine pains followed—soon expelled a mass, which, when collected, filled three ordinary-sized chamber-utensils. After this jelly-like mass had been expelled, she rapidly recovered, and made an uninterrupted recovery."—*British Medical Journal.*

---

*Caneva on the Radical Cure of Complete Prolapse of the Womb.*—The author, Dr. Caneva, of Milan, details (*Gazz. degli Ospitali*) an operation he has recently successfully performed for complete prolapse. The idea is to provide a new suspensory ligament for the prolapsed organ. The operation is as follows. The uterus is held by a sound firmly in contact with the anterior wall of the abdomen. A vertical incision about three inches long, and extending to within two inches of the pubes, is made over the body of the organ, and carried through the linea alba till the peritoneum is exposed. The tissues are to be dissected off this membrane, which is then to be connected by suture with the uterus. Before closing the wound, the sound should be relaxed to see that all is right.

The cut surfaces are then brought together, the peritoneum being included in the sutures. A rigid antiseptic is adopted. Dr. Caneva has performed this operation once, and it was a brilliant success. At first the pressure on the bladder gave rise to some inconvenience, but this soon subsided. An elastic cushion should be worn to protect the organ in its more exposed situation.—*London Medical Record.*

---

*Ringer and Murrel on Amenorrhea.*—Drs. Ringer and Murrel have for some time made extensive trial of permanganate of potash as an emmenagogue in cases of amenorrhea resulting from some trivial cause, such as getting wet or catching cold. In their experimental observations they gave the drug only. The most striking results were in young women between the ages of eighteen and twenty-five, who had missed two or three periods. The administration of one or two grains of permanganate of of potash in pill three or four times a day, for a few days, before the time of the expected period, will bring on the flow almost to a certainty. As a rule, the medicine must be taken three or four days successively to call out the catemenia.—*London Medical Record.*

---

## III.—DISEASES OF CHILDREN.

---

*On the Therapeutic Value of Sulphurous Acid in Scarlatina Maligna.*—Dr. Keith Norman Macdonald, after denying the prevalent opinion, that no reliance can be placed on any drug in cases of scarlatina, does not hesitate in affirming that, when properly applied, both locally and internally, sulphurous acid is by far the most efficacious remedy we possess. He continues, "I have had several opportunities of testing its efficacy in some of the worst cases I have ever seen, during the epidemic which has been rife in this town (Cupar Fife) for the last two months, and I am bound to say that, of all remedial measures in this disease, it is, in my opinion, the most reliable. My treatment is as follows: The moment the throat begins to become affected, I administer to a child, say of about six years of age, ten minims of the sulphurous acid, with a small quantity of glycerine in water, every two hours, and I direct the sulphurous acid spray to be applied every three hours to the fauces for a few minutes at a time, by using the pure acid, in severe cases, or equal parts of the acid and water, according to the severity of the case. Sulphur should also be burned in the sick chamber half a dozen times a day, by placing flour of sulphur upon a red hot cinder, and diffusing the sulphurous acid vapor through the room, until the atmosphere begins to become unpleasant to breathe.

"In the worst cases, where medicine cannot be swallowed, this and the spray must be entirely relied upon; and the dark shades which collect upon the teeth and lips should be frequently laved with a solution of the liquor potass permanganatis of the strength of about one drachm to six ounces of water, some of which should be swallowed if possible.

"In cases presenting a diphtheritic character, the tincture of perchloride of iron should be administered in rather large doses in a separate mixture with chlorate of potash, and equal parts of the same with glycerine should be applied locally, with a camel's hair brush several times in the day; but, as in the majority of cases among children, it is next to impossible to use a local application more than once; the spray and permangate solution will then prove of great service.

"As to other remedies recommended by various authors, ammonia is nasty, and cannot be taken well by children; carbolic acid has the same fault, and cannot be applied properly. Gargles are also useless in children, because they seldom reach the diseased surfaces, and warm baths and wet sheet packing are dangerous, because they are never carried out properly in private practice. The hypodermic injection of pilocarpine is a remedy that may give good results hereafter, but I have had no experience of its use."—*British Medical Journal.*

---

*Whooping Cough.*—In a paper read before the London Medical Society Dr. Dolan (*Lancet*, October 21st, 1882) dissented from the view of Guineau de Mussy that the affection was produced by swollen bronchial glands pressing on the vagus. This was disproved by two facts, first the glands could be swollen without causing whooping cough; second they were not always swollen in the disease. Dr. Dolan adopts the old view that pertussis is caused by a fungus; Poulet has found bacteria in the sputum of pertussis, and by inoculating rabbits with this sputum Letzerich has given them pertussis; Dolan has found that inoculations with the bacteria of pertussis has no effect on animals; inoculation with sputa causes death by pertussis. As might be expected, no pathognomonic pathological lesions were to be found in pertussis. Death usually resulted from complications. Glycosuria was present in fourteen out of fifty of Dolan's. Isolation was the first indication, treatment of complications the next. Antiseptic treatment of the disease itself was likely to have good results.—*American Medical Weekly.*

---

*Nocturnal Eneuresis, Treated by Voltaic Alternatives.* — Dr. Althaus writes: "In June, 1882, I was consulted in the case of a boy, aged 15, who had suffered from incontinence of urine during sleep, ever since he was nine years of age. He had been treated with belladonna and other medicines without relief; and as he was about to enter a public school, where a continuance of this trouble might have been particularly annoy-

ing, the parents were very anxious that something more should be done. The boy's general health was good, but he was considered a nervous child, and highly sensitive. There were no ascarides, but he had a very long prepuce which could only with difficulty be retracted. There was, however, no suspicion of masturbation. Treatment by electricity having been recommended, I applied the middle-sized circular cathode over the region of the bladder, and the large oblong anode (five inches by two) to the lumbar portion of the spine. The current-strength 2.50 milli-ampères for five minutes at a time. As after a few such applications no material benefit appeared to have been gained, I then added fifty voltaic alternatives produced in the metallic circuit. The night after this the boy was free from the usual annoyance, and has made an apparently uninterrupted recovery." Dr. Althaus prefers this method of treatment to injections of nitrate of silver, as recommended by Sir Henry Thompson. He believes that belladonna is of value when eneuresis is distinctly caused by undue excitability of the bladder.—*British Medical Journal.*

---

*Pharyngitis et Lymphadenitis Retropharyngealis in Children.*—Dr. Herz (*Wien. Med. Wochenschr.*) finds chronic pharyngitis very frequently present in children. Sometimes the mucous membrane is hemorrhagic, or eroded or ulcerated. The children suffer, for the most part, from a short, broken cough. Older children complain of a roughness of the throat, or from the sensation of a hair in the throat. The cough is sometimes so great that it leads to vomiting. This condition of the throat is often accompanied by enlargement of the lymph glands of the axilla and inguinal region, and the children may be anæmic, scrofulous, tuberculous or syphilitic. This condition is seldom noticed before the third year. When found sooner it is due to unfavorable hygienic surroundings. In these cases, treatment must be directed to the general health. A flesh diet, wine and iron are useful.

H. reports ten cases of lymphadenitis retropharyngealis which he has observed. The children ranged in age from one to two and one-half years. Of the ten, only three appeared healthy. Three were anæmic and four scrofulous. The enlarged glands varied in size from that of a hemp-seed to that of a bean. In five cases they were situated on the right side; in four, on the left; and in one, along the median line. The affection is most prevalent during the months of winter and spring, and presents the symptoms of acute catarrh. Cold compresses and painting the neck with the iodide of glycerine were the therapeutical measures used.—*Physician and Surgeon.*

---

*Cardiac Complications in Acute Articular Rheumatism in Children.*—From observations made in a series of cases of acute articular rheumatism in children, Dr. Vohsen (*Wiener Med. Wochenschrift*, Nov. 11, 1882)

formulates the following conclusions: 1. In nearly one-half of the cases observed endocarditis occurred and resulted in marked valvular insufficiency. 2. The mitral valve was the one most frequently affected. The endocarditis appeared usually in the first and second weeks of the disease. Pericarditis was also a frequent complication. 3. Salicylate of soda, while it exerted a favorable influence upon the joint affection, seemed not to prevent the cardiac complications. 4. The mild forms of articular rheumatism are especially liable to be followed by cardiac disease, hence a very careful examination of the heart would seem to be necessary in the light cases.—*Medical Record.*

---

*Large Doses of Qninine in Infantile Typhoid.*—Dr. Barthez (*Journal de Méd. de Bordeaux,* Dec. 10, 1882) has recently enunciated the following dictum: "When typhoid fever in the child about the end of the first week simulates tubercular meningitis; in this simulation will be found an indication for large doses of quinine." He has been led to this conclusion by noticing the remarkable improvement produced in the cases of infantile typhoid fever which markedly simulated tubercular meningitis, by the use of ʒss. doses of quinine sulphate. In cases of the type mentioned in which this procedure has been tried the result has been rapid and a decidedly marked amelioration.—*American Medical Weekly.*

---

# Gossip.

---

Report of the Military Lying-in Hospital of Colchester for 1881 and 1882.—Dr. Forbes Dick (Surgeon-Major, A.M.D., in Medical Charge), states in this report that, this hospital is simply a double wooden hut, joined at an angle, and is situated in the camp, which is surrounded by a high wall. It is divided into a confinement room of 1,386 cubic feet, and a lying-in ward of 2,520 cubic feet, and four small rooms which act as kitchen, office, store-room, and matron's room. The lying-in ward has four opposite windows, and is warmed by a central stove; the confinement room has a fireplace. These rooms communicate by opposite doors, which admit of the easy passage of a wheeled *lit de misére.* Other cases of illness are also occasionally admitted for treatment.

In 1881 there were 55 deliveries. Of the mothers, 21 were primiparæ, and 34 pluriparæ; of the children, 32 were males, and 23 females. One female child was still-born, and one male child died of defective development from prematernity in four hours, and another from cyanosis in twenty-four hours. All were head presentations, and the forceps were twice employed in primiparæ. There was no death of a mother.

In 1882 there were 51 deliveries. Of the mothers, 21 were primiparæ, and 30 pluriparæ; of the children, 34 were males and 17 females. A very large male child

of a primipara was stillborn, and also a female twin. A breech-born female child of a primipara was recovered. There was one twin case, one breech case, one forceps case, one case of puerperal fever, and one of puerperal mania. There was no death of a mother nor of a live-born child.

The percentages for the two years of primiparæ was 39.38 and of pluriparæ 60.45; of male children, 62.26; and of female, 37.73; of still-births, 1.89; and of deaths of children from defective development, 1.89; of mothers, none; 106 mothers received 1,386 diets in hospitals, or remained in it on an average 13.07 days, and went home with 102 children.

Both personal and general disinfection are carried out in the hospital. On admission, each woman has a footbath and her knees are well washed. This is useful as much in a disciplinary as in a sanitary point of view. A 1 to 60 solution of carbolic acid containing a minute quantity of cassia oil, which makes the smell agreeable, is used for syringing each case once, and some cases three times daily, and for frequently sponging the genitals. The same solution is evaporated on the central stone, which is very convenient for this purpose; and diapers are washed in chloride of lime water, and choralum wool as a disinfectant absorbent has been lately placed under them. Chloralum wool soaked with lochia has remained six months in a stoppered bottle without tainted odor. It is believed to be a good aid to personal disinfection, and that it would well fulfill this purpose if more absorbent, by being better carded. For the hands, the carbolic solution, carbolic oil and the nail-brush are in constant use.

Six soldiers' wives were trained as midwives and nurses in 1881, and six in 1882. The majority have left this station. Two are at present nursing in officer's families.—*British Medical Journal.*

---

REARING OF HEALTHY CHILDREN.—No sanitary fact, verified by experience and confirmed by authoritative data, has a greater significance than that physical vigor, inherent or acquired, is essential both to the bringing into the world and the rearing of healthy children. Debilitated, sickly women, are notably apt to be the mothers of feeble children, and a child nursed by a feeble mother seldom grows up vigorous. Upon the positive and concurrent testimony of physicians, one of the most desirable means of imparting stamina to weakly females is COLDEN'S (LIEBIG'S) LIQUID BEEF TONIC, prepared after the formula of Baron von Liebig, from the purest Extract of Beef, combined with Iron, Quinine, Gentian and roots known for their tonic and health-giving properties. This sterling and agreeable tonic and article of food is of inestimable service before and after the birth of an infant. It compensates for the unavoidable drain upon the system, and the infant is benefited when the mother or nurse uses it.

---

PROFESSOR CARL BRAUN has performed Porro's operation in Vienna nine times. In eight cases, the pedicles were treated by the extraperitoneal method, and five recoveries were recorded. These five women are now living in Vienna, and are exhibited annually at the clinic. The ligatures in Professor Braun's last case were of strong silk, prepared antiseptically, and were most carefully applied.

---

"A single doctor, like a sculler, plies;
The patient lingers and by inches dies;
But two physicians, like a pair of oars,
Wapt him with swiftness to the Stygian shores."